



SEQUENCE LISTING

<110> LEVINE, et al.

<120> VARIANTS Of PROTEIN KINASES

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<140> 09/771,161

<141> 2001-01-26

<150> 09/724,676

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<170> PatentIn version 3.0

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<210> 11
 <211> 1894
 <212> DNA
 <213> Homo sapiens

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gctgggttca	tggaatgct	tgttggcatc	aacatttctc	tccttttcac	taaggatata	1740
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tttggcatgt	aaagtagttg	agtatgat	ttcacagttc	ttcaggagta	tatatatttca	1860

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1894

<210> 12
<211> 750
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(750)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

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ccgctcagaa cacagcccac ttggatcagt ttgaacgaat caagaccctc ggcacgggct 240
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acatgcagggt ggtctcccag accctgtggg tttctgtttc ccctctgctg aggaatatgt 660
gatatttcaa ccaccacaaa ncaaaacaga gcaaacaggg caacttaggt gtccaaactg 720
aagttgctgc caggcgcggt ggttctcacc 750

<210> 13
<211> 794
<212> DNA
<213> Homo sapiens

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ttccttctcg acccctacat tgccctcaat gtggacgact cgcgcacgcg ccaaacggcc 180
accaagcaga agaccaacag cccggcctgg cacgacgagt tcgtcaccca tgtgtgcaac 240

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 ggtgaagtga aaatacctaa ctctgcattc tgtgaaaggg agagagttga aatgaggcac 480
 agctgaagtt tcaccactcc attattctgc catcaagcat cccttcagct cccatctctc 540
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 ccccttcttc taggatgcgc cgaaggattc tttttcttgc tcatatgctg ttagaaaagcc 720
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 cactgcttgc aaaa 794

<210> 14
 <211> 2083
 <212> DNA
 <213> Homo sapiens

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 taaagaagct gaaataattg aagagaagca gaggccagct gtttttgagg atcctgctcc 300
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 tggactcaga agaaggggat ggagcctggg gccctgagat tccagtggaa cctgatgacc 600
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acacgcctgc tcccagttca ttgcatctat ttttagtctc tgctaacctc ctgagaagtc	1980
cacattctct ttctagattt ggtctgccgc tgctcctggc ctaatttgag caactctcct	2040
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<210> 15
 <211> 1215
 <212> DNA
 <213> Homo sapiens

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ttccaattct gcaaggcttt taaaattcac cttacatctt ttcaaagcaa gaaaatggaa	180
cagcatgtgt aggaattctt cgttgttgtt ttggagccct ctcttaagtc agaactctgt	240
ccccaaaaatc ttctgagtgt catctcagga ctttgggttat actcatggca cgatggccaa	300

ctttcaggag cacctgagct gctcctcttc tccacactta cccttcagtg aaagcaaaac	360
cttcaatgga ctacaagatg agctcacagc tatggggaac cacccttctc ccaagctgct	420
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cgttcttcag ctaagggaac acgatgaatc agagacggcg gtgtctcagg ggaacagcaa	600
cacggtggac ggagagagca caagcggaac tgaagacata aagattcagt tcagcaggtc	660
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gccatttgag gagatctcag agctgcagtg gctgggtagt ggagcccaag gagcggctctt	840
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tgcaagtgga atgaattatt tgcacctcca taaaattatt catcgtgatc tcaaatacacc	1140
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ttttatcaac ctcaa	1215

<210> 16
 <211> 1327
 <212> DNA
 <213> Homo sapiens

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cactgtaatg gttcgtttta atttttcatt ttggattttt ttttaatttc ctttgctact	180
tagattagaa agaacattga tctttcaaac atagatctga atatgaaaga gaaaagaaac	240
acttccatat ttggttagaa gtctatgtgt ggacagagat ggatacataa tttcacatgc	300
ttggcattcc tttttcacac tttaaaatca ggtaataagt cagtccatct gaggaaagcc	360
agttcaccaa atcttcatag acgacagtgg gagaaaaatg taccacaatac agctcttaca	420
gctttggaaa atgcatccat actcacctcc agtttaacag cagaggacga tagagggtgt	480
tctgtaataa agtacagcaa aaatactact cgtaagcagt ggctcaaaga gacctctgac	540

actttgttga acatccttaa gaatgctgat ctcagcttgg cttttcaaac atacacaata 600
tatagaccag gttcagaagg gttcttgaaa ggccccctgt ctgaagaaac agaagcatcg 660
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gaaaaaaa 1327

<210> 17
<211> 364
<212> DNA
<213> Homo sapiens

<400> 17
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ccctgatccc tcagcgttca tgcagcctct tgtccacgga ggctgggtgcc ctgcatgtgc 180
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tccgacctgt gggcgccaat ggccctcccc tgacctcagg gttccttggg ggctgggctg 300
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aaac 364

<210> 18
<211> 923
<212> DNA
<213> Homo sapiens

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acagatgggg cctgcatggg ttccwttttc aatctggatg ggatggagca ccatgtgcgc	240
acctgcatcc ccaaagtgga gctggtcctt gccgggaagc ccttctactg cctgagctcg	300
gaggacctgc gcaacaccca ctgctgctac actgactact gcaacaggat cgacttgagg	360
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gtcattaact atcatcagcg tgtctatcac aaccgccaga gactggacat ggaagatccc	540
tcatgtgaga tgtgtctctc caaagacaag acgtccagg atcttgtcta cgatctctcc	600
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<210> 19

<211> 1739

<212> DNA

<213> Homo sapiens

<220>

<221> -

<222> (1)..(1739)

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atctggtggc cctccagatg aaccgacgtc accggatgcc tggatatgag accatgaaga	180
acaaagacac aggtcactca aataggcaga gtgacgtcag aatcaagttc gagcacaacg	240
gggagaggcg aattatagcg ttcagccggc ctgtgaaata tgaagatgtg gagcacaagg	300
tgacaacagt atttggaaca cctcttgatc tacattacat gaacaatgag ctctccatcc	360
tgtgaaaaa ccaagatgat cttgataaag caattgacat tttagataga agctcaagca	420

tgaaaagcct taggatattg ctgttggtccc aggacagaaa ccataacagt tcctctcccc	480
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tctgacttca ggtccgnagt gactaggggc actggggctt gctccagatt gtgggtgggag	1560
aatgctctac taagagattg atggggtgct ggggtggagg gggggaagcc tgnagcccaa	1620
gagaccctgt tcctggnaga atgaatgggg aatattcata aataatgtac acaaagtaac	1680
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<210> 20

<211> 1832

<212> DNA

<213> Homo sapiens

<220>

<221> -

<222> (1)..(1832)

<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 20

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atctggtggc	cctccagatg	aaccgacgtc	accggatgcc	tggatatgag	accatgaaga	180
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tgagtgacgt	cagaatcaag	ttcgagcaca	acggggagag	gcgaattata	gcgttcagcc	360
ggcctgtgaa	atatgaagat	gtggagcaca	aggtgacaac	agtatttgga	caacctcttg	420
atctacatta	catgaacaat	gagctctcca	tcctgctgaa	aaaccaagat	gatcttgata	480
aagcaattga	catttttagat	agaagctcaa	gcatgaaaag	ccttaggata	ttgctgttgt	540
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gcaggcacct	ctctgtcagc	tcccagaacc	ctggccgaag	ctcacctccc	cctggctatg	720
ttcctgagcg	gcagcagcac	attgcccggc	aggggtccta	caccagcatc	aacagtgagg	780
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aatcacgaat	gtcccgtgcc	cagagcttcc	ctgacaacag	acaggaatac	tcagatcggy	960
aaactcagct	ttatgacaaa	gggggtcaaag	gtggaacctc	cccccgccgc	taccacgtgt	1020
ctgtgcacca	caaggactac	agtgatggca	gaagaacatt	tccccgaata	cggcgtcatc	1080
aaggcaactt	gttcaccctg	gtgccctcca	gccgctccct	gagcacaaat	ggcgagaaca	1140
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tgancctcag	ccaatcctct	gncttcttag	gactctgact	tcaggtcogn	agtgactagg	1620
ggcactgggg	cttgctccag	attgtggtgg	gagaatgctc	tactaagaga	ttgatggggg	1680

gctggggtgg agggggggaa gctgnagcc caagagaccc tggtcctggn agaatgaatg	1740
gggaatatc ataaataatg tacacaaagt aactctttcc ttctgctctc cctgttagct	1800
cccaagtgcc ccccatcaaa cctgggcgcc cg	1832

<210> 21
 <211> 1269
 <212> DNA
 <213> Homo sapiens

<400> 21	
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gcagcgactg ggggcggcgg cggcgcggtt gaggcggcca tggcaaagca gtacgactcg	120
gtggagtgcc ctttttgtga tgaagtttcc aaatacgaga agctcgccaa gatcggccaa	180
ggcaccttcg gggaggtgtt caaggccagg caccgcaaga ccggccagaa ggtggctctg	240
aagaaggtgc tgatggaaaa cgagaaggag gggttcccca ttacagcctt gcgggagatc	300
aagatccttc agcttctaaa acacgagaat gtggtcaact tgattgagat ttgtcgaacc	360
aaagcttccc cctataaccg ctgcaagggt agtatatacc tgggtgtcga cttctgcgag	420
catgaccttg ctgggctgtt gagcaatgtt ttggtcaagt tcacgctgtc tgagatcaag	480
agggtgatgc agatgctgct taacggcctc tactacaacc acgacttctt ctggtccgac	540
cccatgccct ccgacctcaa gggcatgctc tccaccacc tgacgtccat gttcgagtac	600
ttggcaccac cgcgccgga gggcagccag atcaccacc agtccaccaa ccagagtcgc	660
aatcccgcc ccaccaacca gacggagttt gagcgcgtct tctgagggcc ggcgcttgcc	720
actagggctc ttgtgttttt tttcttctgc tatgtgactt gcatcgtgga gacagggcat	780
ttgagtttat atctctcatg catattttat ttaatcccca ccctgggctc tgggagcagc	840
ccgctgagtg gactggagtg gagcattggc tgagagacca ggagggcact ggagctgtct	900
tgtccttgct ggttttctgg atgggtccca gagggtttcc atggggtagg aggatgggct	960
cgcccaccag tgactttttc taagagctcc cggcgtgggt gaagagggga caggtccctc	1020
accacccac aatcctattc tcgggctgag aaccctgcgt ggggacaggg ctgcctcag	1080
gaatgggctg tttttggcct aaccctcaga aacctgggg ctggcacaaa ctcttggttt	1140
cttcaacagg agaattttac tgtgtttctt ttggttccat tgtttggaga cattcctggg	1200
cacagtttgg tccgttagaa ttaaaagttg aatttttttt ttttttwaat tttttttttt	1260
ycccccaaa	1269

<210> 22
<211> 623
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(623)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 22
agccctccca gtttccgcgc gcgtctttgg cagctgggtca catgggtgagg gtgggggtga 60
gggggcctct ctagcttgcg gcctgtgtct atggtcgggc cctctgcgtc cagctgctcc 120
ggaccgagct cgggtgtatg gggccgtagg aaccggctcc ggggccccga taacgggccg 180
ccccacagc accccgggct ggcgtgaggg tctcccttga tctgagaatg gctacctctc 240
gatatgagcc agtggctgaa attggtgtcg gtgcctatgg gacagtgtac aaggcccgtg 300
atccccacag tggccacttt gtgccctcaa gagtgtgaga gtccccaatg gaggaggagg 360
tgaggagggc cttcccatca gcacagttcg tgagggtggct ttactgaggc gactggaggc 420
ttttgagcat cccaatgttg tccggctgat ggacgtctgt gccacatccc gaactgaccg 480
ggagatcaag gtaaccctgg tgtttgagca tgtagaccag gacctaagga catatctgga 540
caaggcacc caccaggct tgccagccga aacgatcaag gtgagtgggg ttggtaggca 600
ttganagggtg gattgggacc ttt 623

<210> 23
<211> 502
<212> DNA
<213> Homo sapiens

<400> 23
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ggaccgagct cgggtgtatg gggccgtagg aaccggctcc ggggccccga taacgggccg 180
ccccacagc accccgggct ggcgtgaggg tctcccttga tctgagaatg gctacctctc 240
gatatgagcc agtggctgaa attggtgtcg gtgcctatgg gacagtgtac aaggcccgtg 300
atccccacag tggccacttt gtgccctcaa gagtgtgaga gtccccacc acctctcctt 360
ttgaggcttc tccttctcct tcccatttct ctacactaag ggggtatgttc cctcttgtcc 420
ctttccctac ctttatatctt ggggtccttt tttatacagg aaaaacaaaa caaagaaata 480

aagtcgacgc ggccgcgaat tc

502

<210> 24
<211> 1148
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(1148)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 24
catcatatga ggtggacagg aagcccagcc aagccatggg ggccgacccc tcccntggat 60
tcacttgcnt ttgagccaca caccctccag ccactaccca tagcagttat ggggggtgtgt 120
cctgggaaga ctcttttctg ctccccaaaa cccaaggcc tggctcgggg ccactggagc 180
cgcaggcggg acatatgtgt gaccggccct ctgccctgg cagccccgcg ctgtgtactg 240
taaggacgtg ctggacatcg agcagttctc cactgtgaag ggcgtcaatc tggaccacac 300
agacgacgac ttctactcca agttctccac gggctctgtg tccatcccat ggcaaaacga 360
gatgatagaa acagaatgct ttaaggagct gaacgtgttt ggacctaata gtaccctccc 420
gccagatctg aacagaaacc accctccgga accgccaag aaagggctgc tccagagact 480
cttcaagcgg cagcatcaga acaattccaa gagttcgccc agctccaaga ccagttttaa 540
ccaccacata aactcaaacc atgtcagctc gaactccacc ggaagcagct agtttcggct 600
ctggcctcca agtccacagt ggaaccagcc cagacccttc tccttagaag tggaagtagt 660
ggagcccctg ctctggtggg gctgccaggg gagaccccg gagccgggga aggaggccgt 720
ccatcccgtc gacgtagaac ctcgaggttt ctcaaagaaa tttccactca ggtctgtttt 780
ccgaggcggc cccggccggg gtggattgga tttgtctttg gtgaacattg caatagaaat 840
ccaattggat acgacaactt gcacgtattt taatagcgtc ataactagaa ctgaattttg 900
tctttatgat ttttaaagaa aagttttgta aatttctcta ctgtctcagt ttacattttg 960
tatatttgta tttaaatgaa agtgagactt tgagggtgta tattttctgt gcagccactg 1020
ttaagccatg tgttccaagg catttttagcg gggaggggggt tatcaaaaaa aaaaaaatgt 1080
gactcaagac ttccagagcc tcaaatgaga aaatgtcttt attaaatgta gaaagtgatc 1140
catacttc 1148

<210> 25
<211> 1679
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(1679)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 25
ccaagattct ctgacctcag cgttccagga gcnccattca gcctttgact aggcaggctc 60
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ggcattttcc tgtgtcctcc cacacctgca ctctcccaag gctcttgagg tcaactctgag 180
atggcagatt ggggtccctg ttgtccttgg acagatgaga atgccgagag ctcgatatgcc 240
tnggccaaagg gcacacagca aggcgggtg cccatgcggc tgtcccaggg acccactgac 300
cctgctgtcc ccctcaggcc acattaggat ctgagacctg ggcttggctg tgaagatccc 360
cgagggagac ctgatccgcg gccgggtggg cactgttggc tacatggctc cagaggtcct 420
gaacaaccag aggtacggcc tgagccccga ctactggggc cttggctgcc tcatctatga 480
gatgatcgag ggccagtcgc cgttccgcg cgcgaaggag aagggtgaagc gggaggaggt 540
ggaccgccgg gtccctggaga cggaggaggt gtactccac aagttctccg aggaggccaa 600
gtccatctgc aagatgctgc tcacgaaaga tgcaagcag aggctgggct gccaggagga 660
gggggctgca gaggtcaaga gacaccctt cttcaggaac atgaacttca agcgcttaga 720
agccgggatg ttggacctc ccttcgttcc agacccccgc gctgtgtact gtaaggacgt 780
gctggacatc gagcagttct ccaactgtgaa gggcgtcaat ctggaccaca cagacgacga 840
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aacagaatgc tttaaggagc tgaacgtgtt tggacctaat ggtaccctcc cgccagatct 960
gaacagaaac caccctccgg aaccgccccaa gaaagggctg ctccagagac tcttcaagcg 1020
gcagcatcag aacaattcca agagttcgcc cagctccaag accagtttta accaccacat 1080
aaactcaaac catgtcagct cgaactccac cggaagcagc tagtttcggc tctggcctcc 1140
aagtccacag tggaaccagc ccagaccctt ctcccttagaa gtggaagtag tggagcccct 1200
gctctgggtg ggctgccagg ggagaccccc ggagccgggg aaggaggccg tccatcccgt 1260
cgacgtagaa cctcgaggtt tctcaaagaa atttccactc aggtctgttt tccgaggcgg 1320
ccccggccgg ggtggattgg atttgtcttt ggtgaacatt gcaatagaaa tccaattgga 1380

tacgacaact tgcacgtatt ttaatagcgt cataactaga actgaatttt gtctttatga	1440
tttttaaaga aaagttttgt aaattttctct actgtctcag tttacatttt gtatatattgt	1500
atttaaataa aagtgaagact ttgaggggtgt atattttctg tgcagccact gttaagccat	1560
gtgttccaag gcatttttagc ggggaggggg ttatcaaaaa aaaaaaatg tgactcaaga	1620
cttccagagc ctcaaatgag aaaatgtctt tattaaatgt agaaagtgat ccatacttc	1679

<210> 26
 <211> 897
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(897)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 26	
ccaagattct ctgacctcag cgttccagga gcnccattca gcctttgact aggcaggctcg	60
gtcaacgtcc agccgggtcc aggcatacta ttgcatctta tgttccactc ctgaagagtg	120
ggcattttcc tgtgtcctcc cacacctgca ctctcccaag gctcttgagg tcaactctgag	180
atggcagatt ggggtccctg ttgtccttgg acagatgaga atgccgagag ctcgatatgcc	240
tnngccaagg gcacacagca aggcgggtg cccatgcggc tgtcccaggg acccactgac	300
cctgtgtgcc ccctcaggcc acattaggat ctgagacctg ggcttggtctg tgaagatccc	360
cgaggagagc ctgatccgcg gccgggtggg cactgttggc tacatggctc cagaggctct	420
gaacaaccag aggtacggcc tgagccccga ctactggggc cttgggtgcc tcacttatga	480
gatgatcgag ggccagtcgc cgttccgcgg ccgcaaggag aaggtgaagc gggaggaggt	540
ggaccgccgg gtcttgagga cggaggaggt gtactccac aagttctccg aggaggccaa	600
gtccatctgc aagatgggtga gtcctgggtg gccagatgcc accctcaagc tgggtggctcc	660
cctccctggg cctggcccca gtctgtcccc agaacagcaa acaggctgaa gggacagggg	720
tctgagcatg ggggtggggg ttgcagccca ccaagctaga gttgagggca ctcttgctg	780
aggactgggg tggtcagcgg agacttccag gagaaagcct ggggtggggca gggacacca	840
gtaaccaagg gaagaggggt gaggggaaca gtgtggaaca ccctcacatc cagcctg	897

<210> 27
 <211> 1224

<212> DNA
<213> Homo sapiens

<400> 27
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ggcgccgttc ctgcgcacgc ccttcaactc ctatgagctg ggctccctgc aggccgagga 120
cgaggcgaac cagcccttct gtgccgtgaa gatgaaggag gcgctcagca cagagcgtgg 180
gaaaacactg gtgcagaaga agccgaccat gtatcctgag tggaaagtcga cgttcgatgc 240
ccacatctat gaggggcgcg tcatccagat tgtgctaata cgggcagcag aggagccagt 300
gtctgaggtg accgtgggtg tgtcggtgct ggccgagcgc tgcaagaaga acaatggcaa 360
ggctgagttc tggctggacc tgcagcctca ggccaagggtg ttgatgtctg ttcagtatct 420
cctggaggac gtggattgca aacagtctat gcgcagtgag gacgaggcca agttcccaac 480
gatgaaccgc cgcggagcca tcaaacaggc caaaatccac tacatcaaga accatgagtt 540
tategccacc ttctttgggc aaccacactt ctgttctgtg tgcaaagact ttgtctgggg 600
cctcaacaag caaggctaca aatgcaggca atgtaacgct gccatccaca agaaatgcat 660
cgacaagatc atcggcagat gcactggcac cgcggccaac agccgggaca ctatattcca 720
gaaagaacgc ttcaacatcg acatgccgca ccgcttcaag gttcacaact acatgagccc 780
caccttctgt gaccactgcg gcagcctgct cctgcccgtc cccacgata agcaccagtg 840
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tctggccggg ctctcatggt acttcctctg tgaactgtgt gtgaatctgc ttttcctctg 960
ccttcggagg gaaattgtaa atcctgtgtt tcattacttg aatgtagtta tctattgaaa 1020
atatatatta tatacataga catatatata tatataatag gctgtatata ttgctcagta 1080
gagaaaaacc atggggggact ggtgatatgt tgatcttttt caaaaaaata tatatatgac 1140
aaaaaaaaaa aaaaaaggag cacaagctgt ttgaaccacc aggtttatct gtgtgtctaa 1200
ataaacacca aatagtacca aaaa 1224

<210> 28
<211> 1424
<212> DNA
<213> Homo sapiens

<400> 28
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tatatatata actaaggtaa caagttgtga ggagtgggta gggtggcttg gatagtgggt 120

aggtaggggtt ggaggaggca aatgatatgg tggaacaagg accttgaaat caatccaaaa	180
cccagggtttt cctaggaagg ccacccggaa cccatggtaa gccaaactgtt gcgcagggat	240
agtgcctcag caggagactt ggcagaaggc agacagaagg aagatgggaa cactggtagt	300
cctggcagcg ttgaggaggc tccagcagag atccagtgtt aagggcccta gaggggctgg	360
tggcaccccc tcaatcttgg tctctctctc ccagagttgt gtgggacccc agggatatcta	420
gcgccagaga tccttaaatg ctccatggat gaaaccacc caggctatgg caaggaggtc	480
gacctgtgag ttcttgggtc cccctccct cccgtgcttg ctgtcctttg ctgggtctgc	540
ccgtcaccta gtcccgctg actccaatct cttttccaag ctctgggcct gtggggtgat	600
cttgttcaca ctctggctg gctcgccacc cttctggcac cggcggcaga tctgatgtt	660
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cactgtcaaa gacctgatct ccaggctgtt gcagggtgat cctgaggcac gcctgacagc	780
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cacccccgc cagcgggtcc ggggtggcagt gtggacagtg ctggctgtg gacgagtggc	900
cctaagcacc catcgtgtac ggccactgac caagaatgca ctgttgaggg acccttatgc	960
gctgcggtca gtgcggcacc tcatcgacaa ctgtgccttc cggctctacg ggcactgggt	1020
aaagaaagg gagcagcaga accgggcggc tctctttcag caccggcccc ctgggccttt	1080
tcccatcatg ggccctgaag aggagggaga ctctgtgtgt ataactgagg atgaggccgt	1140
gcttggtgtg ggctaggacc tcaaccccag ggattcccag gaagcagaac tctccagaag	1200
aagggttttg atcattccag ctctctgtgg ctctggcctc aggccacta atgatcctgc	1260
taccctcttg aagaccagcc cggtaacctc ctccccactg gccaggactc tgagatcaga	1320
gctgggggtg aaggagacca ttctgaacgc cagcctggc cgggtcagt ctgcatgcac	1380
tgcatatgaa ataaaatctg ctacacgcca gggaaaatga ggta	1424

<210> 29
 <211> 2027
 <212> DNA
 <213> Homo sapiens

<400> 29	
gcggccgcgg agtatcctgg agctgcagac agtgcgggcc tgcgcccagt cccggctgtc	60
ctcgccgcga cccctcctca gccctgggcg cgcgcacgct ggggccccgc ggggctggcc	120
gcctagcgag cctgccggtc gacccagcc agcgcagcga cggggcgctg cctggcccag	180

gcgcacacgg aagtgcgctt ctctgaagta gctttggaaa gtagagaaga aaatccagtt	240
tgctttcttgg agaactctgg acagctgaat aaatgcagta tctaaatata aaagaggact	300
gcaatgccat ggctttctgt gctaaaatga ggagctccaa gaagactgag gtgaacctgg	360
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tgggcagtgag agagtacaca gcagaggaac tgtgcatcag ggctgcacag gcatgccgta	480
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ggttctatctt caccaattgg catggaacca acgacaatga gcagtcagtg tggcgtcatt	660
ctccaaagaa gcagaaaaat ggctacgaga aaaaaaagat tccagatgca acccctctcc	720
ttgatgccag ctactggag tatctgtttg ctcagggaca gtatgatttg gtgaaatgcc	780
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aactgcccac ggacatcagc tacaagcgat atattccaga aacattgaat aagtccatca	960
gacagaggaa ccttctcacc aggatgcgga taaataatgt tttcaaggat ttcctaaagg	1020
aatttaacaa caagaccatt tgtgacagca gcgtgtccac gcatgacctg aaggtgaaat	1080
acttggctac cttggaaact ttgacaaaac attacggtgc tgaaatattt gagacttcca	1140
tgttactgat ttcacagaa aatgagatga attggtttca ttcgaatgac ggtggaaacg	1200
ttctctacta cgaagtgatg gtgactggga atcttggaat ccagtggagg cataaaccaa	1260
atgttgtttc tgttgaaaag gaaaaaata aactgaagcg gaaaaaactg gaaaataaag	1320
acaagaagga tgaggagaaa aacaagatcc gggaagagtg gaacaatttt tcattcttcc	1380
ctgaaatcac tcacattgta ataaaggagt ctgtggtcag cattaacaag caggacaaca	1440
agaaaatgga actgaagctc tcttcccacg aggaggcctt gtcctttgtg tccctggtag	1500
atggctactt ccggtcaca gcagatgccc atcattacct ctgcaccgac gtggcccccc	1560
cgttgatcgt ccacaacata cagaatggct gtcatggtcc aatctgtaca gaatacgcca	1620
tcaataaatt gcggcaagaa ggaagcgagg aggggatgta cgtgctgagg tggagctgca	1680
ccgactttga caacatcctc atgaccgtca cctgctttga gaagtctgag caggtgcagg	1740
gtgcccagaa gcagttcaag aactttcaga tcgaggtgca gaagggccgc tacagtctgc	1800
acggttcggg ccgcagcttc cccagcttgg gagacctcat gagccacctc aagaagcaga	1860
tctgcgcac ggataacatc agcttcatgc taaaacgctg ctgccagccc aagccccgag	1920

gttcgtctcc ctgtgccaga gccaggctgt atcccatcag taatgtgctg agacccagat	1980
cgaccaaaac acgctgactg acttaaacia agtggaccct cccccc	2027

<210> 30
 <211> 1609
 <212> DNA
 <213> Homo sapiens

<400> 30	
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cgaggagggg gctgccgcgg gcgaggagga ggggtcgccg cgagccgaag gccttcgaga	120
cccgcgcc gcccgcgggc gagagtagag gcgaggttgt tgtgcgagcg gcgcgtcctc	180
tcccgcccg gcgcgcccg cttctcccag cgcaccgagg accgcccggg cgcacacaaa	240
gccgcgcc gccgcgcacc gcccgcgggc gccgcgccgc ccaggaggagg attcggccgc	300
cgggcccggg acacccccgg gccgccccct cgggtgctctc ggaaggccca ccggtccccg	360
ggcccgccgg ggaccccccg gagccgcctc ggccgcgccg gaggagggcg gggagaggac	420
catgtgagtg ggctccggag cctcagcgcc gcgcagtttt tttgaagaag caggatgctg	480
atctaaacgt ggaaaaagac cagtcccgcc tctgtttag aagacatgtg gtgtatataa	540
agtttgtgat cgttggcgga aattttggaa tttagataat gggctgtgtg caatgtaagg	600
ataaagaagc aacaaaactg acggaggaga gggacggcag cctgaaccag agctctgggt	660
accgctatgg cacagacccc acccctcagc actaccccag cttcggtgtg acctccatcc	720
ccaactacaa caacttcac gcagccgggg gccaaaggact caccgtcttt ggaggtgtga	780
actcttcgtc tcatacgggg accttgcgta cgagaggagg aacaggagt acactctttg	840
tggcccttta tgactatgaa gcacggacag aagatgacct gagttttcac aaaggagaaa	900
aatttcaa attgaaacag tcggaaggag attggtggga agcccgtcc ttgacaactg	960
gagagacagg ttacattccc agcaattatg tggctccagt tgactctatc caggcagaag	1020
agtgttactt tggaaaactt ggccgaaaag atgctgagcg acagctattg tcctttggaa	1080
acccaagagg tacctttctt atccgcgaga gtgaaaccac caaagggtgcc tattcacttt	1140
ctatccgtga ttgggatgat atgaaaggag accatgtcaa acattataaa attcgcaaac	1200
ttgacaatgg tggatactac attaccaccc gggcccagtt tgaaacactt cagcagcttg	1260
tacaacatta ctgagagaga gctgcaggtc tctgctgccg cctagtagtt ccctgtcaca	1320
aagggtatgcc aaggcttacc gatctgtctg tcaaaaccaa agatgtctgg gaaatccctc	1380

gagaatccct gcagttgatc aagagactgg gaaatgggca gtttggggaa gtatggatgg	1440
gtatgctgag actcaattac tctcttatta gcttccccgt ttggaagatc ccaaacacca	1500
aagatggaag gtgaaaataa agactgctg accgggaaga aagtttgaat tactaatagt	1560
ggggaataat aatttcagtt ttggttttaa cattctggaa ttcctaaa	1609

<210> 31
 <211> 1995
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(1995)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 31	
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cccgcgccgc gcccgggcggc gagagtagag gcgaggttgt tgtgcgagcg gcgcgtcctc	180
tcccgcccgg gcgcgccggt cttctcccag cgcaccgagg accgcccggg cgcacacaaa	240
gccgcgcgcc gcgcgcgacc gcccgcggcc gccgcccgcg ccaggaggagg attcggccgc	300
cgggcggggg acaccccggc gccgccccct cgggtgtctc ggaaggccca ccggctcccg	360
ggcccgccgg ggaccccccg gagccgcctc ggccgcgccc gaggagggcg gggagaggac	420
catgtgagtg ggctccggag cctcagcgcc gcgcagtttt tttgaagaag caggatgctg	480
atctaaacgt ggaaaaagac cagtcctgcc tctgtttag aagacatgtg gtgtatataa	540
agtttgtgat cgttggcgga aattttgaca ggggtctcact ctgtcaccca ggctgacacg	600
atcatggctc actacaatct ctgccttctt gcctcaaggg ttcttccttg agcacctcag	660
cctcccaagt agctgggacc acaggaattt agataatggg ctgtgtgcaa tgtaaggata	720
aagaagcaac aaaactgacg gaggagaggg acggcagcct gaaccagagc tctgggtacc	780
gctatggcac agaccccacc cctcagcact accccagctt cgggtgtgacc tccatcccca	840
actacaacaa cttccacgca gccggggggc aaggactcac cgtctttgga ggtgtgaact	900
cttcgtctca tacgggggacc ttgcgtacga gaggaggaac aggagtgaca ctctttgtgg	960
ccctttatga ctatgaagca cggacagaag atgacctgag ttttcacaaa ggagaaaaat	1020
ttcaaataatt gaacagctcg gaaggagatt ggtgggaagc ccgctccttg acaactggag	1080

agacaggtta cattcccagc aattatgtgg ctccagttga ctctatccag gcagaagagt	1140
ggatcttttg aaaacttggc cgaaaagatg ctgagcgaca gctattgtcc tttggaaacc	1200
caagaggtac ctttcttata cgcgagagtg aaaccaccaa aggtgcctat tcactttcta	1260
tccgtgattg ggatgatatg aaaggagacc atgtcaaaca ttataaaatt cgcaaacttg	1320
acaatggtgg atactacatt accacccggg ccagtttga aacacttcag cagcttgtag	1380
aacattactc agagagagct gcaggctctc gctgccgcct agtagttccc tgtcaciaag	1440
ggatgccaaag gcttaccgat ctgtctgtca aaaccaaaga tgtctgggaa atccctcgag	1500
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cctggaatgg aaacacaaaa gtagccataa agactcttaa accaggcaca atgtcccccg	1620
aatcattcct tgaggaagcg cagatcatga agaagctgaa gcacgacaag ctggtccagc	1680
tctatgcagt ggtgtctgag gagcccatct acatcgtcac cgagtatatg aacaaagggt	1740
gggcaacacc tctcctgtct ccagctcaca gtgccttaag gggttgttta ggggagagaa	1800
atggaagttt cctacttget acttttctag tttctgcctg ggtcaagtat tcccattagg	1860
aaccaccagt tatgtgctcg ttaatgaaaa catTTTTTaa aacagactaa ccttgcgttt	1920
accccccccc aaatccttat gaaatgccaa atactTTTTa catgttatgt gtgtcagaaa	1980
ttcatncttc tntcc	1995

<210> 32
 <211> 2590
 <212> DNA
 <213> Homo sapiens

<400> 32	
gcacgagact ggaactgcct gcggggcatt gggagcgccc agacctggag ctgctggaaa	60
gagtaccag caagggagag cctgggactt ggagctgcta gagaaggggtg ctgggagcct	120
cccgttacg tatggaaagt gtctttgtct ctccctggagc tgcacaagag gaggaaagcc	180
ctgactgagc ctgaggcccg atactaccta cggcaaattg tgcttggtg ccagtacctg	240
caccgaaacc gagttattca tcgagacctc aagctgggca accttttcct gaatgaagat	300
ctggaggtga aaatagggga ttttggactg gcaaccaaag tcgaatatga cggggagagg	360
aagaagacc tgtgtgggac tcctaattac atagctcccg aggtgctgag caagaaaggg	420
cacagtttcg aggtggatgt gtgggtccatt ggggtgatca tgtatacctt gttagtgggc	480
aaaccacctt ttgagacttc ttgcctaaaa gagacctacc tccggatcaa gaagaatgaa	540

tacagtattc ccaagcacat caaccccgtg gccgcctccc tcatccagaa gatgcttcag	600
acagatocca ctgcccgcgc aaccattaac gagctgctta atgacgagtt ctttactttct	660
ggctatatcc ctgcccgtct ccccatcacc tgctgacca ttccaccaag gttttcgatt	720
gctcccagca gcttggaacc cagcaaccgg aagcccctca cagtcctcaa taaaggcttg	780
gagaaccccc tgctgagcg tccccgggaa aaagaagaac cagtggttcg agagacaggt	840
gaggtggctg actgccacct cagtgacatg ctgcagcagc tgcacagtgt caatgcctcc	900
aagcccctcg agcgtgggct ggtcaggcaa gaggaggctg aggatcctgc ctgcatcccc	960
atctttctggg tcagcaagtg ggtggactat tcggacaagt acggccttgg gtatcagctc	1020
tgtgataaca gcgtgggggt gctcttcaat gactcaacac gcctcatcct ctacaatgat	1080
ggtgacagcc tgcagtacat agagcgtgac ggcactgagt cctacctcac cgtgagttcc	1140
catcccaact ccttgatgaa gaagatcacc ctccctaaat atttccgcaa ttacatgagc	1200
gagcacttgc tgaaggcagg tgccaacatc acgccgcgcg aaggatgatga gctcgcccgg	1260
ctgccctacc tacggacctg gttccgcacc cgcagcgcca tcatcctgca cctcagcaac	1320
ggcagcgtgc agatcaactt cttccaggat cacaccaagc tcatcttggtg ccactgatg	1380
gcagccgtga cctacatcga cgagaagcgg gacttccgca cataccgcct gagtctcctg	1440
gaggagtacg gctgctgcaa ggagctggcc agccggctcc gctacgcccg cactatgggtg	1500
gacaagctgc tgagctcacg ctcggccagc aaccgtctca aggctccta atagctgccc	1560
tcccctccgg actggtgccc tctcactcc cacctgcacg tggggcccat actggttggc	1620
tcccgcggtg ccatgtctgc agtgtgcccc ccagccccgg tggctgggca gagctgcacg	1680
atccttgacg gtgggggttg ctgtataagt tatttttgta catgttcggg tgtgggttct	1740
acagccttgt cccctcccc ctcaacccca ccatatgaat tgtacagaat atttctattg	1800
aattcggaac tgtcctttcc ttggctttat gcacattaaa cagatgtgaa tattcttttt	1860
cttgatattc ctgaggggtg ccagggcctg ggatccagcg aacatctctg cttcatcagc	1920
cccaggctgc ccagcctctg ccagtcttgt gggggaaagg gggtgacagt gtctctctgt	1980
ggaccaggct ggagtgcagt ggcacgatcc tggctcactg cagcctcgaa ctctgggct	2040
caagtgattc tcccacctca gcctcccaag cagctgggac tacaggcgtg cgccaccatg	2100
cctggctaatt tttaaaaatt ttttgtagaa atgggggtgt gccatgttgg ccaggctggt	2160
ctcgaactcc tgagctcaag tgatcctctc actcagcctc ccaaaatgct gggattacag	2220

gtgtgagcca ctgcacccag cctgattctg aggccagcca caggctcagc tcttcagtga	2280
gccagcacgg agaccatctg tgtggcatcc agcccacctc acctccctgt ggccccaggg	2340
satggctcct ggccctctgag tctggcgggt agtagggcag gaagaggctc tcagaggcgc	2400
agctcctcat ggctcgggtgc gtgtggagga gcagccgtgg ggagcggttt gtgagtactg	2460
gacgaagcca tcaggacttg gcgagtgcct gtcgcacctc aactgggagc ttcttgatg	2520
gtgcctcttg tctcacagca cggagcaggt ctcgcactga tgtcccctta tagggaccgg	2580
actttctcag	2590

<210> 33
 <211> 1096
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> -
 <222> (1)..(1096)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 33	
ggctcctgga tccggetacc tggcagaggc tcctggccac tgttcgcagg tcttcccttg	60
ctctgaaagc agcagaggct ctgctcacgg gcaggctagg ctttcatcac ggtaggatag	120
ggaaggccat ggctctgttg cctccttttc ttgcctctca cagattggaa gtatctaggg	180
acagtgggtg gctaggacag tgctggctgc agggggctctg ggagcgtkkg cctcacagt	240
gccttctcta tcctctgcaa caccctccag ccgaattctc aacatacctc aacttctgcc	300
gctccctgcg gtttgacgac aagcccgact actcttacct acgtcagctc ttccgcaacc	360
tcttccaccg gcagggcttc tcctatgact acgtctttga ctggaacatg ctgaaattcg	420
gggcttcctc gagccaggct cagccccgtg acagccccat gacagcgaag ggacctttct	480
gtccccgcc ctgtccctgt gctgggcccc cgtactcacc cacgtactgg tgcccggtc	540
ccctgggcac ccagagcccc ccagataggc cggaggagga ggtggaggag ctgtcccccc	600
aaaactactg gcctgtggtc tggactccag ggccccattt ctgatgtcgc caggtgtgcc	660
tgagcccatc ggggccaggc ctgaggaagt gtttcttggg aggatgggat gacccctgt	720
tcccaagaga tggcagcaca gtggaggcca tgggtgaaaa ggccctgcc tggggtcctt	780
gagggccagg acagcctgag ggagggatgg tggccactgc ccacaagggg cctggtggga	840
acgggtccca ggacagactc atagctagac cccgttggcg gcctctgtgt tgaaccagaa	900

ctcattaaac acctcctctt gcttcaaaaw rgtgtgcctc tttcatggca gggccctcag	960
ccaccctgct agatgggttag gaccaaggct ctgttctcct ggaagccaag gtcggcacat	1020
tggtcttggg cttctcttct ctctgggttt cttgttcact aaggagtaac acagaggtca	1080
ggcagagaat gggggg	1096

<210> 34
 <211> 940
 <212> DNA
 <213> Homo sapiens

<400> 34	
ggctcctgga tccggctacc tggcagaggc tcctggccac tggtcgcagg tcttcccttg	60
ctctgaaagc agcagaggct ctgctcacgg gcaggctagg ctttcatcac ggtaggatat	120
ggaaggccat ggctctgttg cctccttttc ttgcctctca cagattggaa gtatctaggg	180
acagtgggtg gctaggacag tgctggctgc aggggggtctg ggagcgtkgg cctcacagtg	240
gccttctcta tcctctgcaa caccctccag ccgaattctc aacatacctc aacttctgcc	300
gctccctgcg gtttgacgac aagcccgact actcttacct acgtcagctc ttccgcaacc	360
tcttccaccg gcagggttc tcctatgact acgtctttga ctggaacatg ctgaaattcg	420
gggcttcctc gagccaggct cagccccgtg acagcccat gacagcgaag ggacctttct	480
gtccccgccc ctgtccctgt gctgggccc cgtactcacc cacgtactgg taaggatcct	540
ctgaggtctg gcttttccaa aatttgccac ttgaccagtg agcgcaggag gccatggtgg	600
aaaaggccct gccatggggt ccttgagggc caggacagcc tgagggaggg atggtggcca	660
ctgcccacaa ggggcctggt gggaacgggt ccaggacag actcatagct agacccggt	720
ggcggcctct gtgttgaacc agaactcatt aaacacctcc tcttgcttca aaawrgtgtg	780
cctctttcat ggcaggggccc tcagccaccc tgctagatgg ttaggaccaa ggctctgttc	840
tcctggaagc caaggctcggc acattggtct tgggcttctc ttctctctgg gtttcttggt	900
cactaaggag taacacagag gtcaggcaga gaatgggggg	940

<210> 35
 <211> 951
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(951)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 35
ggctcctgga tccggctacc tggcagaggc tcttggccac tgttcgcagg tcttcccttg 60
ctctgaaagc agcagaggct ctgctcacgg gcaggctagg ctttcatcac ggtaggatag 120
ggaaggccat ggctctgttg cctccttttc ttgcctctca cagattggaa gtatctaggg 180
acagtgggtg gctaggacag tgctggctgc agggggctctg ggagcgtkkg cctcacagtg 240
gccttctcta tcctctgcaa caccctccag ccgaattctc aacatacctc aacttctgcc 300
gctccctgcg gtttgacgac aagcccgact actcttacct acgtcagctc ttccgcaacc 360
tcttccaccg gcagggcttc tcctatgact acgtctttga ctggaacatg ctgaaattcg 420
gcggcccccct tcctgccagc cccctgccct tccctgtgga cggccccagg atgaactagg 480
gtgcagcccc gaatcccgag gatgtggacc gggagcggcg agaacacgaa cgcgaggaga 540
ggatggggca gctacggggg tccgcgaccc gagccctgcc ccctggccca cccacggggg 600
ccactgccaa ccggctccgc agtgccgccg agcccgtagg ttccacgcca gcctcccgca 660
tccagccggc tggcaatact tctcccagag cgatctcgcg ggtcgaccgg gagaggaagg 720
tgagtatgag gctgcacagg ggtgcgcccc ccaacgtctc ctctcagac ctactgggc 780
ggcaagaggt ctcccggatc ccagcctcac agacaagtgt gccatttgac catctcgga 840
agtgaggaga gccccattg gaccagtgtt tgcttagtgt ctactgta ttttctttaa 900
aaamaaaam aaaaawaaam srcmaaaakw acmacwmaaa aaccagcac a 951

<210> 36
<211> 2063
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(2063)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 36
gcggccgccc gaaaagcgct tcggccacat ccagcagcag tagcagccgc aaggaccggg 60
actcgaaggc ccaccgcagc cggactaagt cgtccaagga gccgccttcg gcctacaagg 120
aaccgccccaa ggctaccggg gaggacaaga ccgagcctaa ggctacagg cgggcgcggt 180
ccctcagccc actgggaggg cgggacgaca gcccgtgtc ccacagggcc tctcagagcc 240
tgaggagccg caagtcccc agcccggcag gaggtggcag cagccctat tctcgcgccg 300

tgccgcgctc cccgagcccc tacagtgcgc gccgctcccc cagctacagc cgccacagct	360
cctacgagcg gggcggcgac gtgtccccta gtccctacag cagcagcagc tggcgccgct	420
ctcgcagtcc ctacagccct gtgtcagac ggtctggaaa atcccgaaagc agaagcccgt	480
attcatctag gcattcaaga tctcgtagca ggcacagatt gtctagatcc agaagtcgtc	540
attctagtat ttctcctagc aactaactc tgaagagtag cctggcagct gaattgaaca	600
agaataaaaa agcacgagca gcagaggcag caagagccgc agaagcagcg aaagctgcag	660
aagcaactaa ggctgctgag gctgctgcca aggctgcaaa agcttcaaac acttctacac	720
ctaccaaggg gaacacggaa actagtgcc gtgcatcaca aacaaaccat gtgaaggatg	780
tgaagaaaat taaaattgaa catgcacctt ctccctcaag tgggtggaact ttaaaaaatg	840
acaaagcaaa aacaaagcca cctcttcagg taacgaaggt ggaaaataat ttgattgtag	900
ataaagccac caagaaagca gtcatagttg gaaaggagag taaatctgct gctacaaagg	960
aggaatcagt atctcttaaa gagaaaacca aaccacttac accaagcata ggagccaagg	1020
agaaggagca acatgtagct ttagtcacct ctacattacc accgttacct ttgcctccca	1080
tgctgcctga agataaagaa gctgatagct tacgaggaaa tatttcagta aaagcagtta	1140
aaaaagaagt agaaaagaaa ctccgatgtc ttcttgctga tttaccgctg cccctgagc	1200
taccaggagg agatgatctt tcaaagagtc cagaggaaaa gaaaacagca acacagttac	1260
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tgattctggg tcatcagaag ttcataaaac actaaattaa ggtttaaaat aaaaaatgta	1380
cttattcttt caacttaaat atatgaattc tattagagtt ttgaaaaaaaa tcataattgc	1440
ttgcattcct attcacaatg actaataaaa ccaaatttaa ttttcwctcg taatttgtaa	1500
tgtattaatt tcctggggta ttgtatatgt taaagatact ttctgttatt aagagattga	1560
aataacacaa aactgaaat tgggcagagt agaagtcagc atttagtgag accaaataaa	1620
attagtaatg ggcaagctgc tgtttccttt gcttttagct ccattttctc ccataaacia	1680
atatattctt cactttgcaa gagatggagt agaagaagtt ttgaaatttg taccctaaat	1740
tagcttcaag taagtgccta aagagacctc tttcccttaa aacctgttaa tcagttaaag	1800
gcgggggaaca ctggtgcctt tttttttttt tttttttaac ttcttaacca agggacagtg	1860
aagactttta gttagatctg attttagaat tgcagttgag gtagtgccta gtgtgtgaat	1920
ttgaggtcat tttctaaact ggccggggcac agtgggtcat gcctgtaatc ccagcacttt	1980

gggaggccca ggtgggagaa tcacttgagt ccaggagttt gataccagcc tgagcaacac	2040
agggaaacccc atctctacca aaa	2063

<210> 37
 <211> 1393
 <212> DNA
 <213> Homo sapiens

<400> 37	
ggccgggctt gcgcagcgct aggctcctcg ccgctcctag tctgcggcgg cggcggcggg	60
gagggcgcgg ccgcgggcgg ggctgagggc ggcgggggcg ggccgcccga gctgggaggg	120
cggcggcgcc gaggggagga gagcgcccca tggaccgcg gggcccggcg cccagactc	180
tgcgccgtcg ggacggagcc caagatgtcg gcctaggccg gggcgcgacg acgcggacgg	240
ggcggcgagg aggcgccgct gctgccgggg ctcgcagccg ccgagcccc gagggcgcg	300
cctgacggac tggccgagcc ggcggtgaga ggccggcgcg tcgggagcgg gccgcgcggc	360
accatgtcgg ccaaggtcgg gctcaagaag ctggagcagc tgctcctgga cgggccctgg	420
cgcaacgaga gcgccctgag cgtggaaacg ctgctcgacg tgctcgtctg cctgtacacc	480
gagtgcagcc actcggccct gcgccgcgac aagtacgtgg ccgagttcct cgagtgggct	540
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cgaatttatg caatgaaaat cctcaacaag tgggagatgc tgaaaagagc agagaccgcg	720
tgcttccgag aggagcgcga tgtgctgggtg aacggcgact gccagtggat caccgcgctg	780
cactacgcct ttcaggacga gaaccacctg tacttagtca tggattacta tgtgggtggg	840
gatttactga ccctgctcag caaatgtgaa gacaagcttc cggaagatat ggcgaggttc	900
tacattgggtg aaatgggtgct ggccattgac tccatccatc agcttcatta cgtgcacaga	960
gacattaaac ctgacaatgt ccttttggac gtgaatggtc atatccgcct ggctgacttt	1020
ggatcatgtt tgaagatgaa tgatgatggc actgtgcagt cctccgtggc cgtgggcaca	1080
cctgactaca tctcgccgga gatcctgcag gcgatggagg acggcatggg caaatacggg	1140
cctgagtgtg actgggtggc tctgggtgtc tgcatgtatg agatgctcta tggagaaacg	1200
ccgttttatg cggagtcact cgtggagacc tatgggaaga tcatgaacca tgaagagcga	1260
ttccagttcc catcccatgt cacggatgta tctgaagaag cgaaggacct catccagaga	1320
ctgagttgca tccaaagaac accataccta cagtgaagca tgggggaaac atcatgcttt	1380

ggggctgttt ttc

1393

<210> 38
<211> 1244
<212> DNA
<213> Homo sapiens

<400> 38
ggccgggctt gcgcagcgct aggtctctcg ccgctcctag tctgcggcgg cggcggcggg 60
gagggcgcgg ccgcgggcgg ggctgagggc ggcgggggcg ggccgcccga gctgggaggg 120
cggcggcgcc gaggggagga gagcggccca tggacccgcg gggcccggcg ccccagactc 180
tgcgccgtcg ggacggagcc caagatgtcg gcctagggcg gggcgcgacg acgcggacgg 240
ggcggcgagg aggcgccgct gctgccgggg ctcgcagccg ccgagcccc gagggcgcg 300
cctgacggac tggccgagcc ggcggtgaga ggccggcgcg tcgggagcgg gccgcgcggc 360
accatgtcgg ccaaggtgcg gctcaagaag ctggagcagc tgctcctgga cgggccctgg 420
cgcaacgaga gcgccctgag cgtggaaaacg ctgctcgacg tgctcgtctg cctgtacacc 480
gagtgcagcc actcggccct gcgccgcgac aagtacgtgg ccgagttcct cgagtgggct 540
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 <212> DNA
 <213> Homo sapiens

<400> 44

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 <212> DNA
 <213> Homo sapiens

<220>
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 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

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<210> 46
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(1479)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

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 <211> 1223
 <212> DNA
 <213> Homo sapiens

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 <211> 1154
 <212> DNA
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 <211> 930
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 <213> Homo sapiens

<400> 49	
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gccaaggagg gacagaaatg gatggcttta ggagaaccat agaaaaccag cactctcgta	240
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cccagaggaa tcagggggct gagagacaag gcatgaactg gtccctgcagg accccggagc	540
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gagacaacaa ctacttgact atgcaacaga caactgcctt gccacatgg ggcttggcac	660
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aagatcctga agcctggagc aggccacagg gttggtataa tcatagcggg aaataaagca	780
ccttccaagc ttgcctccaa gagttacgag ttaaggaaga gtgccacccc ttgaggcccc	840
tgacttcctt ctagggcagt ctggcctgcc cacaaactga ctttgtgacc tgtccccag	900
gagtcaataa acatgatgga atgctaataa	930

<210> 50
 <211> 2616
 <212> DNA
 <213> Homo sapiens

<400> 50	
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gactgcaggc gcatgccacc atggtcagct aattttaaaaa aaaaatgttt ttggctgggc	180
aaagtggatc acatctgtaa tcccagcacc tagggatgcc aaggcaagaa gattgcttgt	240
gagcccagaa gttcgagacc agcctgggca acatggtgaa actctacctc taccaaaaaa	300
atgtaaaaat tagccatatt tgacctcaag tctagacaga acttctttgt atattttaga	360
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cagattgggg agggaaagga tggtgggcta agggctgtga gcttatgtta caggcaactg	2520
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 <212> DNA
 <213> Homo sapiens

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cctggagggga agaacgtatg ggagaggaag gaagcgagtt gcccggtgtgt gcaagctgcy	180
gccagaggat ctatgatggc cagtacctcc aggcctgaa cgcggactgg cacgcagact	240
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agctcttctg caagaaggac tactgggccc gctatggcga gtcttgccat ggggtgctctg	360
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ggg	1323

<210> 52
 <211> 1262
 <212> DNA
 <213> Homo sapiens

<400> 52	
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cctggagggga agaacgtatg ggagaggaag gaagcgagtt gcccggtgtgt gcaagctgcg	180
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gg	1262

<210> 53
 <211> 2518
 <212> DNA
 <213> Homo sapiens

<400> 53	
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tggtccctgc tagagcagct gggcctggcc ggggcagacc tggcggcccc cggggtacag	180
cagcagctgg agctggagcg ggagcggctg cggcgggaaa tccgcaagga gctgaagctg	240
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<210> 54
 <211> 1464
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(1464)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 54
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 ggaagcctca gtggccggag cagcctcaaa gcagaagccg agaacaccag tgaagtcagc 1260
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 ccgcggagca ggcagccttc ctggacttcg acttcgtggc cgggggctgc tagccccctc 1380
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 ttgccggatc cttgcaccc caaa 1464

<210> 55
<211> 1080
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(1080)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 55
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gggtggtgagg tagctccagg tccaaaaggc cacaagaggt catgttctcc agctgtggga 180
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taccaatatt taaaagtttg tataataata aagagtatga ttgtgggttca aggataaaaa 1080

<210> 56
<211> 1665
<212> DNA
<213> Homo sapiens

<400> 56

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<210> 57
<211> 2081
<212> DNA
<213> Homo sapiens

<400> 57
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<210> 58
 <211> 1097
 <212> DNA
 <213> Homo sapiens

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<210> 59
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 <212> DNA
 <213> Homo sapiens

<220>
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 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

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 <211> 2195
 <212> DNA
 <213> Homo sapiens

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aagccatgga aggaaagggt ccaagtgggtc aggcgagagc ctccagggca aaggccttgg	180
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gctggaggga ttttgagcag cagagggaca taggttgtgt tagtgtttga gcaccagccc	360
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graaggaagg gggctttgga tcattgcagg agctatgggg attccagaaa tgttgaggga	480
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<210> 61
 <211> 1662
 <212> DNA
 <213> Homo sapiens

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<210> 62

<211> 1149

<212> DNA

<213> Homo sapiens

<400> 62

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<210> 63
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 <212> DNA
 <213> Homo sapiens

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 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

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<210> 64
 <211> 765
 <212> DNA
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<400> 64	
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ttctccaagt tgggggctca gaggggagtc atcatgagcg atgttaccat tgtgaaagaa	180
ggttgggttc agaagagggg agaatatata aaaaactgga ggccaagata cttccttttg	240
aagacagatg gctcattcat aggatataaa gagaaacctc aagatgtgga tttaccttat	300
ccctcaaca acttttcagt ggcaagtagt gttatgttca gatatttgca gaatttaacc	360
ttaaaccaag tttagaattg ggaatggaga aaacctttgt aaaaattatt ttaaaatgag	420
atcattttta agaaaactat aatgtaacaa tgtcacatat ttccttcttc aggctccaat	480
tcaaatcata ctccaatttg aaaagaacaa aaattccaca aaacgttcat tctttcctac	540
tttttcctta cgttgtacaa caaatgtgga aagaaaaaaa aaacagaaaa agtgtatccc	600
atcttaatga aatgactgc ggcagtcaag agtttcaaat ccagctgcca ggggtgaaag	660
caacctctg catctctgaa agatttcata agtggttatct cctttataat cataactttt	720
catgtgtatc atctgagttt cttattaaat aatctcacta taaaa	765

<210> 65
 <211> 968
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(968)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 65	
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ttctccaagt tgggggctca gaggggagtc atcatgagcg atgttaccat tgtgaaagaa	180
ggttgggttc agaagagggg agaatatata aaaaactgga ggccaagata cttccttttg	240
aagacagatg gctcattcat aggatataaa gagaaacctc aagatgtgga tttaccttat	300
ccctcaaca acttttcagt ggcaaaatgc cagttaatga aaacagaacg accaaagcca	360
aacacattta taatcagatg tctccagtgg actactgtta tagagagaac atttcatgta	420
gatactccag aggaaagggg agaatggaca gaagctatcc aggctgtagc agacagactg	480
cagaggcaag aagaggagag aatgaattgt agtccaactt cacaaattga taatatagga	540
gaggaagaga tggatgcctc tacaacccat cataaaagaa agacaatgaa tgattttgac	600
tatttgaaac tactaggtaa aggcactttt gggaaagtta ttttggttcg agagaaggca	660

agtggaaaat actatgctat gaagattctg aagaaagaag tcattattgc aaaggtaact	720
gatttattaa agttgattac taaatTTTTg tttgcagtgt gcatgtgttt gtgggctcat	780
gaatttacat gctaattgat gcaaattcca ttaaacaacc naaatatggg tgnagactac	840
tgctacagta atTTTTgtgt attaataattt gtaatTTTTa agtTTTcag acattcataa	900
tatttgtata ttatatacta aagctattct ctttaaggaaa tagaaatggt tatgtttgca	960
tgtttggg	968

<210> 66
 <211> 2410
 <212> DNA
 <213> Homo sapiens

<400> 66	
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atttaacagc tcgcagtttc cccttggaaa cctggaaaag ataagccagc tgctgtctaa	180
gagtgtcag tgtccactga gagtacacta tctatcatca caatatgggtg atgagaggtg	240
ttttatgttt gtgttaattt cccccactaa atcagtaatt attacaatcc tgtccctgct	300
gtttaccctg cagctgtttt tccatttgtc gagagagcgg gtgttctctg aggaccgcac	360
acgtttctat ggtgcagaaa ttgtctctgc cttggactat ctacattccg gaaagattgt	420
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cactccagaa tatctggcac cagaggtggt agaagataat gactatggcc gagcagtaga	600
ctgggtggggc ctaggggttg tcatgtatga aatgatgtgt gggaggttac ctttctacaa	660
ccaggaccat gagaaacttt ttgaattaat attaattgaa gacattaaat ttctcgaac	720
actctcttca gatgcaaaat cattgctttc agggctcttg ataaaggatc caaataaacg	780
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tgagacagat actagatatt ttgatgaaga atttacagct cagactatta caataacacc	960
acctgaaaaa tatgatgagg atggatatgga ctgcatggac aatgagaggc ggccgcattt	1020
ccctcaattt tcctactctg caagtggacg agaataagtc tctttcattc tgctacttca	1080
ctgtcatctt caatttatta ctgaaaatga ttcttggaac tcaccagtcc tagctcttac	1140

acatagcagg ggcaccttcc gacatcccag accagccaag ggtcctcacc cctcgccacc	1200
tttcaccctc atgaaaacac acatacacgc aaatacactc cagtttttgt ttttgcata	1260
aattgtatct cagtctaagg tctcatgctg ttgctgctac tgtcttacta ttatagcaac	1320
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caattatcat cttttgatct tttagttttt ccctcagtga aggctaaatg agatacactg	1440
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gtttataaat tcagaacaag caattgtgga aggggtggtgg cgtgcatatg taaagcacat	1560
cagatccgtg cgtgaagtag gcatatatca ctaagctgtg gctggaattg attaggaagc	1620
atttggtaga aggactgaac aactgttggg atatatatat atatataaa tttttttttt	1680
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tgtcatgtta gcaaacgcag ctccaactta tataaaatag acttactgca gttacttttg	2160
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tgctgccatt taacccttg gtactgaaaa tgagaaaatc cccaactatg catgccaagg	2340
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<210> 67
 <211> 798
 <212> DNA
 <213> Homo sapiens

<400> 67	
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cgcgcgctcg gccggccgtg gggcggggca taggcgtgac gtggtgtcgc gtatcgagtc	120
tccgccccct tccgcctcc ccgtatataa gacttcgccg agcactctca ctgcacaag	180

tggaccgggg	tgttgggtgc	tagtcggcac	cagaggcaag	ggtgcgagga	ccacggccgg	240
ctcggacgtg	tgaccgcgcc	taggggggtg	cagcgggcag	tgcggggcgg	caaggcgacc	300
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gcgctgggca	agggttgcgg	agggaactcg	aagaagaagc	ggccgccgca	gccccccgag	420
gaatcgcagc	cacctcagtc	ccaggcgcaa	gtgcccccg	cggccccctca	ccaccatcac	480
caccattcgc	actcggggcc	ggagatctcg	cggattatcg	tcgacccac	gactgggaag	540
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gatttgacaa	ataacaaagt	ctacgccgca	aaaattattc	ctcacagcag	agtagctaaa	660
cctcatcaaa	gggaaaaggt	gtgtatgact	cttgagtaaa	gtattttctt	tgtgtgcaag	720
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tgactggaag	ctaataag					798

<210> 68
 <211> 877
 <212> DNA
 <213> Homo sapiens

<400> 68	
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cgcgcgctcg	gccggccgtg gggcggggca taggcgtgac gtggtgtcgc gtatcgagtc 120
tccgccccct	tccgcctcc ccgtatataa gacttcgccg agcactctca ctgcacaag 180
tggaccgggg	tgttgggtgc tagtcggcac cagaggcaag ggtgcgagga ccacggccgg 240
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gcgctgggca	agggttgcgg agggaactcg aagaagaagc ggccgccgca gccccccgag 420
gaatcgcagc	cacctcagtc ccaggcgcaa gtgcccccg cggccccctca ccaccatcac 480
caccattcgc	actcggggcc ggagatctcg cggattatcg tcgacccac gactgggaag 540
cgctactgcc	ggggcaaagt gctgggaaag ggtggctttg caaaatgtta cgagatgaca 600
gatttgacaa	ataacaaagt ctacgccgca aaaattattc ctcacagcag agtagctaaa 660
cctcatcaaa	gggaaaagat tgacaaagaa atagagcttc acagaattct tcatcataag 720
catgtagtgc	agttttacca ctacttcgag gacaaagaaa acattttacat tctcttgaa 780
tactgcagta	gaagggtaag tgtcaactcc tatttgagaa catttgctta ccccgaatta 840

acatggtatt caaagagtat tttatctggg attaccc

877

<210> 69
<211> 1349
<212> DNA
<213> Homo sapiens

<400> 69
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tccgccccct tccgcctcc ccgtatataa gacttcgccg agcactctca ctgcacaaag 180
tggaccgggg tgttgggtgc tagtcggcac cagaggcaag ggtgcgagga ccacggccgg 240
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gaatcgagc cacctcagtc ccaggcgcaa gtgcccccg cgccccctca ccaccatcac 480
caccattcgc actcggggcc ggagatctcg cggattatcg tcgacccac gactgggaag 540
cgctactgcc ggggcaaagt gctgggaaag ggtggctttg caaaatgtta cgagatgaca 600
gatttgacaa ataacaaagt ctacgccgca aaaattattc ctacagcag agtagctaaa 660
cctcatcaaa gggaaaagat tgacaaagaa atagagcttc acagaattct tcatcataag 720
catgtagtgc agttttacca ctacttcgag gacaaagaaa acatttacat tctcttgaa 780
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caggctaagg catacagttc ttgactttgg acaatccaag agtgaaccag aatgcagttt 960
tccttgagat acctgtttta aaagggtttt cagacaattt tgcagaaagg tgcattgatt 1020
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cctgaagggg agggagaagg gaggaagctc ccatgttggt taaaggctgt aattggagca 1140
gcttttggct gcgtaactgt gaactatggc catatataat tttttttcat taatttttga 1200
agatacttgt ggctggaaaa gtgcattcct tgttaataaa ctttttattt attacagccc 1260
aaagagcagt atttattatc aaaatgtctt tttttttatg ttgaccattt taaaccgttg 1320
gcaataaaga gtatgaaaac gcagaaaaa 1349

<210> 70

<211> 538
<212> DNA
<213> Homo sapiens

<220>
<221> -
<222> (1)..(538)
<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 70
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ggatgactga gacattatgg gccacgcgct gtgtgtctgc tctcggggaa ctgtcatcat 180
tgacaataag cgctacctct tcatccagaa actggggggag ggtgggttca gctatgtgga 240
cctagtggaa gggttacatg atggacactt ctacgccctg aagcgaatcc tgtgtcacga 300
gcagcaggac cgggaggagg cccagcgaga agccgacatg catcgccctct tcaatcaccc 360
caacatcctt cgccctcgtgg cttactgtct gagggaaacgg ggtgctaagc atgaggcctg 420
gctgctgcta ccattcttca aggtcagaaa gactcctggt tatggagggg gttgcagcag 480
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<210> 71
<211> 3308
<212> DNA
<213> Homo sapiens

<400> 71
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ggcgtcagtg gctgcgcctc catgcctgcg cgcggggcg gacgctgatg gagcgcgcca 180
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taacagttta atcatctcac ttgctaacat gtttttattt ttcactgtaa atatgtttat	3180
gttttattta taaaaattct gaaatcaatc catttgggtt ggtggtgtac agaacacact	3240
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ttaaaaaa	3308

<210> 72
 <211> 3503
 <212> DNA
 <213> Homo sapiens

<400> 72	
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ggagagcgtc gggcgggagg cgggtggtcct gggagcggcc ccggcgccc aagccgcccc	180
gagctggtgg ggagggtccc ggcgggtggg gccgggctgg cgggggaggg gcgcctgggg	240
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cggctctcaa gctcacctgg gaagaccatg cccaccaccc agagctttgc ctgagacccc	2040
aagtaccca cccccagggt gatccaggcc cctggccgc gggctggtcc ctgcatcctg	2100
cccatcgtcc gggatggcaa gaaggtcagc agcaccact attacttgct gcccgcgca	2160
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<210> 73

<211> 2544

<212> DNA

<213> Homo sapiens

<220>

<221> -

<222> (1)..(2544)

<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 73

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gagaggaagc ccgctacgag tgccctagct ccccgccgct ctcgatgaac cggacggaat	180
aagccgcgcc tccagcaggg gctgcgcctc catgaatccc tagttgtttt ttttttttc	240
tttctctccc ctctctcac cccacccccg agccccgtcc cgccttctcc cttcgccaga	300
ggggccggt ccaggtgcgg agtccatacc ggagcgcaat ggcgtccaac cccgaacggg	360
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tcaaggatcg aattaagaga gaaataagga aagaactgaa aatcaaagaa ggagctgaaa	540
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aatcaaataa aaaattagaa gaactacatc acaagctgca ggaattaaat gcacatattg	660
ttgtatcaga tccagaagat attacagatt gcccaaggac tccagatact ccaaataatg	720
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ggagtctcgc tttgtcgcgc agac	2544

<210> 74

<211> 2324

<212> DNA

<213> Homo sapiens

<220>

<221> -

<222> (1)..(2324)

<223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 74

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gagaggaagc ccgctacgag tgccctagct ccccgccgct ctcgatgaac cggacggaat	180
aagccgcgcc tccagcaggg gctgcgcctc catgaatccc tagttgtttt tttttttttc	240
tttctctccc ctctcctcac cccacccccg agccccgtcc cgccttctcc cttcgccaga	300
ggggccgcgt ccaggtgcgg agtccatacc ggagcgcaat ggcgtccaac cccgaacggg	360
gggagattct gctcacggaa ctgcaggggg attcccgaag tcttccgttt tctgagaatg	420

tgagtgtgtg	tcaaaaatta	gacttttcag	atacaatgg	gcagcagaaa	ttggatgata	480
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aatcaaataa	aaaattagaa	gaactacatc	acaagctgca	ggaattaaat	gcacatattg	660
ttgtatcaga	tccagaagat	attacagatt	gcccaggac	tccagatact	ccaaataatg	720
accctcgttg	ttctactagc	aacaatagat	tgaaggccct	acaaaaacaa	ttggatatag	780
aacttaaagt	aaaacaaggt	gcagagaata	tgatacagat	gtattcaaat	ggatcttcaa	840
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aagtcatacg	aatgcagatt	cttcaggcag	tccagactaa	tgaattggct	tttgataatg	960
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atgaatcttc	tgaattaaga	gttttgata	taccaggaca	ggcaagccat	tttaaacctt	2160

gcataattcc tcttcactga atgaattagc aataaaagca tcatagtga taaggcgtgt	2220
ctttccattt aaaattgcc ctgaactgtg aatttatggt tttttgtttg ttttttgttt	2280
ttgtttttgt tttttgagac ggagtctcgc tttgtcgcgc agac	2324

<210> 75
 <211> 1396
 <212> DNA
 <213> Homo sapiens

<400> 75	
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tgtcagaggc cgatggagaa ctgaagattg ccacctacgc acaaaggcca ttgagacact	120
tcgtgtagct ggaagacacc aacttcctga caggagcttt atttcatttg ggatttcaag	180
tttacagatg gtatcttctc aaaagttgga aaaacctata gagatgggca gtagcgaacc	240
ccttcccatc gcagatgggtg acaggaggag gaagaagaag cggagggggcc gggccactga	300
ctccttgcca ggaaagtttg aagatatgta caagctgacc tctgaattgc ttggagaggg	360
agcctatgcc aaagttcaag gtgccgtgag cctacagaat ggcaaagagt atgccgtcaa	420
aatcatcgag aaacaagcag ggcacagtcg gagtaggggtg tttcgagagg tggagacgct	480
gtatcagtggt cagggaaaca agaacatttt ggagctgatt gagttctttg aagatgacac	540
aaggttttac ttggtctttg agaaattgca aggagggtact taccgttgag tatgtgtgtg	600
gacttctgat taagaccag ggtggtgatc atccatcatg aatcccagag acttccaaaa	660
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aggccggagg gaaggatgat aattagcatt ttgcagagct tagaatgtca cctgtgtggg	780
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gaggtgggggt agagaaaccc tttcccttcc catcactccc ccaggctcttg tgtgggtggc	1140
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tcagataagt ggaactattg agttacataa agaaaataga tttgcatttg tcaggcagac	1320

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<210> 76
 <211> 513
 <212> DNA
 <213> Homo sapiens

<400> 76	
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tgtcagaggc cgatggagaa ctgaagattg ccacctacgc acaaaggcca ttgagacact	120
tcgtgtagct ggaagacacc aacttctga caggagcttt atttcatttg ggatttcaag	180
tttacagatg gtatcttctc aaaagttgga aaaacctata gagatgggca gtagcgaacc	240
ccttcccatc gcagatggtg acaggaggag gaagaagaag cggagggggcc gggccactga	300
ctccttgcca ggaaagtttg aagatatgta caagctgacc tctgaattgc ttggagaggg	360
agcctatgcc aaagttcaag gtgccgtgag cctacagaat ggcaaagagt atgccgtcaa	420
agtgagtgtc tcagctgaat gccaggcttt actttgcaaa tagtcattcc tagctcatct	480
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<210> 77
 <211> 2044
 <212> DNA
 <213> Homo sapiens

<400> 77	
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ccgaggaagc cacccttgct ttcaggatgg attgttagca gttccgttgg cctcagacac	120
caacttgaac tgatcgtctt ggacatgtgt ctccagtga aatctgtgac tttgacttgg	180
gcagtgggat gaaactgaac aactcctgta cccccataac cacaccagag ctgaccaccc	240
catgtggctc tgcagaatac atggcccctg aggtagtgga ggtcttcacg gaccaggcca	300
cattctacga caagcgctgt gacctgtgga gcctgggcgt ggtcctctac atcatgctga	360
gtggctaccc acccttcgtg ggtcactgcg gggccgactg tggctgggac cggggcgagg	420
tctgcagggt gtgccagaac aagctgtttg aaagcatcca ggaaggcaag tatgagtttc	480
ctgacaagga ctgggcacac atctccagtg aagccaaaga cctcatctcc aagctcctgg	540
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ggcaagctcc agaaaagggg ctccccacgc cgcaagtcct ccagaggaac agcagcacaa	660
tggacctgac gctcttcgca gctgaggcca tcgcccttaa ccgccagcta tctcagcacg	720
aagagaacga actagcagag gagccagagg cactagctga tggcctctgc tccatgaagc	780
tttccccctcc ctgcaagtca cgcttgcccc ggagacgggc cctggcccag gcaggccgtg	840
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aggcctggcc aggcattgtc ccctggaaac ctgtgtggct aaagtctgct gagcaggcag	960
cagcctctgc tctgtggctc cattcaggct ttttcatcta cgaaggccct gaggttccca	1020
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agttagatag tgctctgtgc ctaagggtgaa gccacactag ggtgaagcct cacttccctg	1860
tttgagcaat gcagtgcctg ctgcccgtgt gcatgaaggt acagccattc agataagtgg	1920
aactattgag ttacataaag aaaatagatt tgcatttgtc aggcagacgt ttatacaaca	1980
ccacggtgct ttatacatt gtgcttattt taataaaact gaaattctat gtgtggccta	2040
aaaa	2044

<210> 78

<211> 934

<212> DNA

<213> Homo sapiens

<400> 78

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gctgctaaaa tgaatctgag	caatatggaa tattttgtgc	cacacacaaa aaggtactga	120
agatttacct cccaaaaaaa	attgtcaatg agaaataaag	ctaactgata tcaaaaagca	180
gagcctgctc tactggccat	catgcgtaaa ggggtgctga	aggacccaga gattgccgat	240
ctattctaca aagatgatcc	tgaggaactt tttattgggt	tgcatgaaat tggacatgga	300
agttttggag cagtttattt	tgctacaaat gctcacacca	gtgagggtggg ggcaattaag	360
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gaacacactg cttgggttgg	gatggaatat tgcttaggct	cagcctctga tttattagaa	540
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tttcttttca gttgcaggac	tgtctattcc aggaaccttg	aaaattagtg catgctccaa	720
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ataaagttgc cagaatttag	cttctatctc ttattctctc	ctacgtatcc acaattatat	840
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<210> 79
 <211> 1032
 <212> DNA
 <213> Homo sapiens

<400> 79	
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ggcggcggcg gcggcggcag	120
cagaaatgat ggaagaattg	catagcctgg acccacgacg
gcaggaatta ttggaggcca	180
ggtttactgg agtaggtggt	agtaagggac cacttaatag
tgagtcttcc aaccagagct	240
tgtgcagcgt cggatccttg	agtgataaag aagtagagac
tcccagagaaa aagcagaatg	300
accagcgaaa tcggaaaaga	aaagctgaac catatgaaac
tagccaaggg aaaggcactc	360
ctagggggaca taaaattagt	gattactttg agacagcccc
tctatggttt agatggcagt	420
gctgcaaagg aggcaacaga	ggagcagtct gctctgccaa
tcctcacgtc agtgatgcta	480
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gagctggcct ctgcttcact	540

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<210> 80
 <211> 2234
 <212> DNA
 <213> Homo sapiens

<400> 80	
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aggcagtggg ggcgggggtg cccgggcatt tggaggccgc cagctgcac ccccttccc	360
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aatccggaag tcaaagttct catggtcaga agttctcatg gtgcacgagt cctcagcact	960

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ttgggagcat ggcagacagg gaagggaac attttcaggg aaaagacatg tatcacatgt	2040
cttcagaagc aagtcagggt tcatgtaacc gagtgtcctc ttgcgtgtcc aaaagtagcc	2100
cagggctgta gcacaggctt cacagtgatt ttgtgttcag ccgtgagtca cactacatgc	2160
ccccgtgaag ctgggcattg gtgacgtcca ggttgtcctt gagtaataaa aacgtatgtt	2220
gcaatctcgg gaaa	2234

<210> 81
 <211> 2608
 <212> DNA
 <213> Homo sapiens

<400> 81	
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tacagcccg gcaattcagt ttctacatca ggacagcccc agcctcatcc atggagacat	180

caagagttcc aacgtccttc tggatgagag gctgacaccc aagctgggag actttggcct	240
ggccccgttc agccgctttg ccgggtccag cccagccag agcagcatgg tggccccgac	300
acagacagtg cggggcaccc tggcctacct gcccaggag tacatcaaga cgggaaggct	360
ggctgtggac acggacacct tcagctttgg ggtggtagtg ctagagacct tggctgggtca	420
gagggctgtg aagacgcacg gtgccaggac caagtatctg aaagacctgg tggaagagga	480
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caggggcccc aagaaagtga tgaatttcag agctgatgtg ttcacctggg cagatcccc	1320
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gttctaggct ctgtgggcat aggcaggcag agtggaaacc tgctccatg ccagcatctg	1500
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ctgcacagac ccgtgagttg aggagagggg ctgctgtgca ggggtgtggag taggagctgg	1620
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ctgcttaciaa tttggaaaag tgtggccggg tgcggtggct cagcctgta atcccagcac	1800
tttgggaggc caaggcagga ggatcgctgg agcccagtag gtcaagacca gccagggcaa	1860
catgatgaga ccctgtctct gccaaaaaat tttttaaaact attagcctgg cgtggtagcg	1920

acgcttgtgg	tcccagctgc	tggggaggct	gaagtaggag	gatcatttat	gcttgggagg	1980
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agtccatgca	agaagcgaga	attctgagat	cctccagaaa	gtcgagcagc	accacactcc	2160
aacctcgggc	cagtgtcttc	aggctttact	ggggacctgc	gagctggcct	aatgtggtgg	2220
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aggccacaag	ctcagcctca	ggcccaggca	ctgattgtgg	cagaggggcc	actaccaag	2340
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catgtatcac	atgtcttcag	aagcaagtca	ggtttcatgt	aaccgagtgt	cctcttgctg	2460
gtccaaaagt	agcccagggc	tgtagcacag	gcttcacagt	gattttgtgt	tcagccgtga	2520
gtcacactac	atgccccctg	gaagctgggc	attggtgacg	tccaggttgt	ccttgagtaa	2580
taaaaacgta	tgttgcaatc	tcgggaaa				2608

<210> 82
 <211> 1237
 <212> DNA
 <213> Homo sapiens

<400> 82	
cgcggaacccg	gcccggcccag gcccgcgccc gccgcggccc tgagaggccc cggcaggctcc 60
cgggccggcg	gcggcagcca tggccggggg gccggggccc ggggagcccg cagcccccg 120
cgcccagcac	ttcttgtacg aggtgccgcc ctgggtcatg tgccgcttct acaaagtgat 180
ggacgcccctg	gagcccgcgc actggtgcca gtgcgccgcc ctgatcgtgc gcgaccagac 240
cgagctgcgg	ctgtgcgagc gctccgggca gcgcacggcc agcgtcctgt ggccctggat 300
caaccgcaac	gcccgtgtgg ccgacctcgt gcacatcctc acgcacctgc agctgctccg 360
tgcgcgggac	atcatcacag cctggcacc tcccgccccg cttccgtccc caggcaccac 420
tgccccgagg	cccagcagca tccctgcacc cgccgaggcc gaggcctgga gcccccgaa 480
gttgccatcc	tcagcctcca ccttcctctc ccagctttt ccaggctccc agaccattc 540
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agcccccttct	tctaccaagc caggcccaga gagctcagtg tccctcctgc agggagcccg 660
cccctctccg	ttttgctggc ccctctgtga gatttcccgg ggcacccaca acttctcgga 720
ggagctcaag	atcggggagg gtggccttgg gtgcgtgtac cgggcggtga tgaggaacac 780

gggtgatgct gtgaagaggc tgaaggagaa cgctgacctg gagtggactg cagtgaagca	840
gagcttcctg accgaggtgg agcagctgtc caggtttctg caccctaaaca ttgtggactt	900
tgctggctac tgtgctcaga acggcttcta ctgcctggtg tacggcttcc tgcccaacgg	960
ctccctggag gaccgtctcc actgccagac ccaggcctgc ccacctctct cctggcctca	1020
gcgactggac atccttctgg gtacagcccg agcaagtcag gtttcatgta accgagtgtc	1080
ctcttgctg tccaaaagta gcccaagggt gtagcacagg cttcacagtg attttgtggt	1140
cagcgtgag tcacactaca tgccccctg aagctgggca ttggtgacgt ccaggttgtc	1200
cttgagtaat aaaaacgtat gttgcaatct cgggaaa	1237

<210> 83
 <211> 1286
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(1286)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 83	
gaggggacct taaaaattac cggccacaaa aagaaaataa atttaggaaa aattattggt	60
ttatttttagg gtgatgttca cagaagaaga tgtcaaattc tacttggtg aacttgact	120
tgcttttagac catctacata gcctgggaat aatttataga gacttaaaac cagaaaatat	180
acttcttgat gaagaaggtc acatcaagtt aacagatttc ggcctaagta aagagtctat	240
tgaccatgaa aagaaggcat attctttttg tggaactgtg gagtatatgg ctccagaagt	300
agttaatcgt cgaggtcata ctacagagtgc tgactgggtg tcttttggtg tgtaaatgtt	360
tgaaatgctt actggtacac tccctttcca aggaaaagat cgaaaagaaa caatgactat	420
gattcttaaa gccaaacttg gaatgccaca gtttttgagt cctgaagcgc agagtctttt	480
acgaatgctt ttcaagcgaa atcctgcaaa cagattaggt gcaggaccag atggagtgtga	540
agaaattaaa agacattcat ttttctcaac gatagactgg aataaactgt atagaagaga	600
aattcatccg ccatttaaac ctgcaacggg caggcctgaa gatacattct attttgatcc	660
tgagtttact gcaaaaactc ccaaagattc acctggcatt ccacctagt ctaatgcaca	720
tcagcttttt cgggggttta gttttgttgc tattacctca gatgatgaaa gccaaagctat	780
gcagacagtt ggtgtacatt caattgttca gcagttacac aggaacagta ttcagtttac	840

tgatggatat gaagtaaaag aagatattgg agttggctcc tactctgttt gcaagagatg	900
tatacataaa gctacaaaca tggagtttgc agtgaaggta aatttttttt atttaaaatg	960
caattcatac agttcttggt catgcatgtc agtaccagtt aaaaattaca ctcccccttgt	1020
tgttaaaagt gccttttggt ataaaaaagt taaatatctg gctagtgatc ttcagagatc	1080
ttaatctaga accctgtgag ctaaaggtaa ggtgggtata tatctagttt tcccagagca	1140
gtagcagttt acacctcaag tgattttttt tcttttttta cctcaagtga tttttaaaagt	1200
atcttttttac tctgagaagt ccccatttta tgctcanggt gtcagcaaat tcctcaaaat	1260
tgtgtgcaaa attttgtatg ttta	1286

<210> 84
 <211> 752
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(752)
 <223> "n" can be any nucleotide 'a', 'c', 'g' or 't'

<400> 84	
atgccgctgg cgcagctggc ggacccgtgg cagaagatgg ctgtggagag cccgtccgac	60
agcgtgaga atggacagca aattatggat gaacctatgg gagaggagga gattaaccca	120
caaactgaag aagtcagtat caaagaaatt gcaatcacac atcatgtaaa ggaaggacat	180
gaaaaggcag atccttccca gtttgaactt ttaaaagtat tagggcaggg atcatttggg	240
aaggttttct tagttaaaaa aatctcaggc tctgatgcta ggcagcttta tgccatgaag	300
gtattgaaga aggccacact gaaagttcga gaccgagttc ggacaaaaat ggaacgtgat	360
atcttggtag aggttaatca tccttttatt gtcaagttgc attatgcttt tcaaactgaa	420
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aaagaggtga tgttcacaga agaagatgtc aaattctact tggctgaact tgcacttgct	540
ttagaccatc tacatagcct ggaataatt tatagagact taaaaccaga aaagtaagga	600
atcatgctac taagttgaat acaatgtaat atgattgttt aggagattat aaaaaatcaa	660
gtggcttcat gaaactccca cagtaatgtn tagcgtgcct gtgcttcaca tctctgctaa	720
cactgtagtt tcatacttta aatnactcag tt	752

<210> 85
<211> 1826
<212> DNA
<213> Homo sapiens

<400> 85
cgagcgcggc gcccttgagc tgcaccgcgg cgcaggtttg cgagccgact tgtcagccgg 60
ccaagaaaag gaagctccgt cccttcccg caccgcggct tccccacccc ttgtactcta 120
aactctgcas agggcgagcg ygcggccack gakgcgccga ggaggagcga gcgccgccgg 180
gcagcggcgt gccctcgggg gagagggcgc cggakargag cggcggcgcg gcggcgakgg 240
cgcggcgcgc gatggcagct gcttagcccg gcgggcgcgg agcagccccg agctgtggct 300
ggccaggcgg tgcggctggg cgggggacgc cgccgccgtt gctgcccggc ccggagagat 360
gagcacggag gcggacgarg gcatcacttt ctctgtgcca cccttcgccc cctcgggctt 420
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cgaggagcac cagctgccac cgccgccgcc gggcagyttc tggaacgtgg agagcgccgc 540
tgcccctggc atcggttgtc cggcgccac ctcccgagc agtgccaccc gaggccgggg 600
cagctctgtt ggcgggggca gccgacggac cacggtggca tatgtgatca acgaagcgag 660
ccaagggcaa ctggtggtgg ccgagagcga ggcctgcag agcttgcggg aggcgtgcga 720
gacagtgggc gccaccctgg aaaccctgca ttttgggaaa ctcgactttg gagaaaccac 780
cgtgctggac cgcttttaca atgcagatat tgcggtggtg gagatgagcg atgccttccg 840
gcagccgtcc ttgttttacc accttggggg gagagaaagt ttcagcatgg ccaacaacat 900
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gaagaatact atgtgcactg ggaactacac ctttgttcct tacatgataa ctccacataa 1020
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gaaggtggca caagcaagtt ctagccagta cttccgggaa tctatactca atgacatcag 1200
gaaagctcgt aatttataca ctggtaaaga attggcagct gagttggcaa gaattcggca 1260
gcgagtagat aatatcgaag tcttgacagc agatattgtc ataaatctgt tactttccta 1320
cagagatatc caggactatg attctattgt gaagctggta gagactttag aaaaactgcc 1380
aacctttgat ttggcctccc atcaccatgt gaagtttcat tatgcatttg cactgaatag 1440
gagaaatctc cctggtgaca gagcaaaagc tcttgatatt atgattccca tgggtgcaaag 1500
cgaaggacaa gttgcttcag atatgtattg cctagttggg cgaatctaca aagatatgtt 1560

tttggactct aatttcacgg acactgaaag cagagaccat ggagcttctt ggttcaaaaa	1620
ggcatttgaa tctgagccaa cactacagtc aggaattaat tatgcggtcc tcctcctggc	1680
agctggacac cagtttgaat cttcctttga gctccggaaa gttggtaatt acaacttgat	1740
atttctacat ggaaatcaag aaactcggac ccaacttggt gcaaagacgg atctccgccg	1800
attctgacgg ctctccaggt tttgtc	1826

<210> 86
 <211> 476
 <212> DNA
 <213> Homo sapiens

<400> 86	
gccggcggtg gcgcggcgga gaccggctg gtataacaag aggattgcct gatccagcca	60
agatgcagag cacttctaata catctgtggc ttttatctga tatttttaggc caaggagcta	120
ctgcaaagtgt ctttcgtgga agacataagt ggatgttcaa atgagagaat ttgaagtgtt	180
gaaaaaactc aatcacaaaa atattgtcaa attatttgct attgaagagg agacaacaac	240
aagacataaa gtacttatta tggaattttg tccatgtggg agtttataca ctgttttaga	300
agaaccttct aatgcctatg gactaccaga atctgaattc ttaattgttt tgcgagatgt	360
ggcgggtgga atgaatcatc tacgagagaa tggatatagt caccgtgata tcaagccagg	420
aaatatcatg cgtgcactat accattctct cgtagatgat tcattccacc caccac	476

<210> 87
 <211> 2131
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(2131)
 <223> "n" can be any nucleotide 'a', 'c', 'g' or 't'

<400> 87	
gaattattgc tttggaagaa aacttacat ctccacaaga ccttgcttcc caaataagac	60
atgtcagaag atgctgataa tcctcacttc tgcattacaa atcgctcata ggtgcatctg	120
caggatctta cttggatcca gaggctagc tgcaaaagct tctgggaatt gtacacttaa	180
ctctgaagtt ttatctttaa tataggaagt gccgcgtatg atgctgtcct tgacagaaat	240
gtggccatta agaagctcag cagacccttt cagaacccaa cacatgccaa gagagcgtac	300

cgggagctgg	tcctcatgaa	gtgtgtgaac	cataaaaaca	ttattagttt	attaaatgtc	360
ttcacacccc	agaaaacgct	ggaggagttc	caagatgttt	acttagtaat	ggaactgatg	420
gatgccaaact	tatgtcaagt	gattcagatg	gaattagacc	atgagcgaat	gtcttacctg	480
ctgtaccaaaa	tgttgtgtgg	cattaagcac	ctccattctg	ctggaattat	tcacagggat	540
ttaaaaccaa	gtaacattgt	agtcaagtct	gattgcacat	tgaaaatcct	ggactttgga	600
ctggccagga	cagcaggcac	aagcttcatg	atgactccat	atgtggtgac	acgttattac	660
agagcccctg	aggtcacct	ggggatgggc	tacaaggaga	acgtggatat	atggctctgtg	720
ggatgcatta	tgggagaaat	ggttcgccac	aaaatcctct	ttccaggaag	ggactatatt	780
gaccagtga	ataaggtaat	tgaacaacta	ggaacaccat	gtccagaatt	catgaagaaa	840
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cccaaactct	tcccagattc	cctcttccca	gcggactccg	agcacaataa	actcaaagcc	960
agccaagcca	gggacttggt	gtcaaagatg	ctagtgattg	accagcaaaa	aagaatatca	1020
gtggacgacg	ccttacagca	tcctacatc	aacgtctggt	atgaccacgc	cgaagtggag	1080
gcgcctccac	ctcagatata	tgacaagcag	ttggatgaaa	gagaacacac	aattgaagaa	1140
tggaaagaac	ttatctacaa	ggaagtaatg	aattcagaag	aaaagactaa	aatggtgta	1200
gtaaaaggac	agccttctcc	ttcagcacag	gtgcagcagt	gaacagcagt	gagagtctcc	1260
ctccatcctc	gtctgtcaat	gacatctcct	ccatgtccac	cgaccagacc	ctggcatctg	1320
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caagcctaaa	attaaataaa	tctttcagcc	tgcttcttcc	ccagggttct	gtattgcagc	1560
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atggatgtag	atacagatcc	gcatgtgtct	gtattcatac	agcactactt	acttagagat	1860
gctactgtca	gtgtcctcag	ggctctacca	agacataatg	cactggggta	ccacatggtc	1920
catttcatgt	gatctattac	tctgacataa	acccatctgt	aatatattgc	cagtatataa	1980
gctgtttagt	ttgttaattg	attaaactgt	atgtcttata	agaaaacatg	taaaggggga	2040

atatatgggg ggagtgagct ctctcagacc cttgaagatg tagcttccaa atttgaatgg 2100
 attaaatggc acctgtatac caattttag a 2131

<210> 88
 <211> 989
 <212> DNA
 <213> Homo sapiens

<400> 88
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 cccctgtatt tcacgcagct ctctaaattg actcagctcc aggctagtgt gagaaacacc 120
 aacagcaggc ccatctcaga tcttcactat ggcaacttat gcaagaaact gttgaattag 180
 acccgtttcc tatagatgag aaaccataca agctgtggta tttatgagcc tccatttctt 240
 atactactgc agtgaaccaa cattggatgt gaaaattgcc tttgtcagg gattcgataa 300
 acaagtggat gtgtcatata ttgccaaaca ttacaacatg agcaaaagca aagttgacaa 360
 ccagttctac agtgtggaag tgggagactc aaccttcaca gttctcaagc gctaccagaa 420
 tctaaagcct attggctctg gggctcaggg catagtttgt gccgcgtatg atgctgtcct 480
 tgacagaaat gtggccatta agaagctcag cagacccttt cagaaccaa ccatgcca 540
 gagagcgtac cgggagctgg tcctcatgaa gtgtgtgaac cataaaaacg tgagttttgt 600
 tatttttaaa cttctggcag tgggagtttg taagattgga aaaagaaaat gtgtctgtac 660
 ttgagtaaga aaggctttct ttgctttgca attcctgcct cttagattg tttatcctgc 720
 caatatgcta cattcgattt cattgtcctc atggtagctt tctgcttaaa aatcacctaa 780
 aaaccatatg atgtggaagt gatgaatttt ataaatattt ccctagttag aaaatttacc 840
 atatttggtt atcttgctcc aaattgagag cttcaagaaa gaaacaagac aaacaaagcc 900
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 ttttaatttag aatttattaa tttaaaatt 989

<210> 89
 <211> 1818
 <212> DNA
 <213> Homo sapiens

<400> 89
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ctccagcctg ggcaacaaga gcgaaactcc atctcaaaaa gaaaaaaaaa gatatatatg	180
tgtgacttac aggtacaggt aaagttgctt ctggttttct ggttggtgca tggatatttcc	240
tatgcagcca caggtcttta ttttcttact taagtgcctc caacttccca taacacaaat	300
taaggcatga tgaacatcct ctctgtgctg aacatcctgt gtatgtcact tcagaagcct	360
gtgtgacggg ttcttttagtc ttatataccta ggggtgggat ttctgggtca taggacagta	420
atttatattt atttcactaa gtattctctt tctctggctt ttgttacata ttacctgttt	480
gtcctccaga aaacttgcac caatttacat tcctaccaat agggtaggag agtgcacaat	540
gggtggattc taactccaaa tctaaccct cttcttttct ttgtttctag cagccatggc	600
aatgacaggc tcaacacctt gctcatccat gagtaaccac acaaaggaaa gggtgacaat	660
gaccaaagtg aactggaga atttttatag caaccttctc gctcaacatg aagaacgaga	720
aatgagacaa aagaagttag aaaagggtgat ggaagaagaa ggcctaaaag atgaggagaa	780
acgactccgg agatcagcac atgctcggaa ggaaacagag tttcttcgtt tgaagagaac	840
aagacttgga ttggaagatt ttgagtcctt aaaagtaata ggcagaggag catttggtga	900
ggtagcgctt gttcagaaga aagatacggg acatgtgtat gcaatgaaaa tactccgtaa	960
agcagatatg cttgaaaaag agcaggttgg ccacattcgt gcggagcgtg acattctagt	1020
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ctacctaatc atggagtcty tgcctggagg ggacatgatg accttggtga tgaaaaaaga	1140
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aagggccatg tgaaactttc tgactttggt ctttgcacag gactgaaaaa agcacatagg	1320
acagaatttt ataggaatct gaaccacagc ctccccagtg atttcacttt ccagaacatg	1380
aattccaaaa ggaaagcaga aacctggaaa agaaatagac gtcagctagc cttctccaca	1440
gtaggcactc ctgactacat tgctcctgag gtgttcatgc agaccgggta caacaagctc	1500
tgtgattggt ggtcgcttgg ggtgatcatg tatgagatgc tcatcggtaa gttgcatggt	1560
ttcagaggac tttttctgtg catccatgac agacttttac attgatacca gcctctgttt	1620
caattggcag tgatctaagt gatttcccta cttgtctttc aaagtgaatt gttttagaca	1680
gatgacacct ctttcagtaa gatgtatccc actccattct tgggcttact ggcacacctg	1740
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tagaagctct tttagtca	1818

<210> 90
 <211> 2732
 <212> DNA
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(2732)
 <223> "n" can be any nucleotide 'a', 'c' , 'g' or 't'

<400> 90
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 tagcaacaat tcttaaagag gttttggaag gcttagacta tctacacaga aacgggtcaga 180
 ttcacagggga tttgaaagct ggtaatatc ttctgggtga ggatgggttca gtacaaatag 240
 cagattttgg ggtaagtgcg ttcctagcaa caggggggtga tgttaccgga aataaagtaa 300
 gaaaaacatt cgttggcacc ccatgttgga tggctcctga agtcatggaa caggtgagag 360
 gctatgactt caaggctgac atgtggagtt ttggaataac tgccattgaa ttagcaacag 420
 gagcagcgcc ttatcacaaa tatcctccca tgaaagtgtt aatgttgact ttgcaaaatg 480
 atccaccacac tttggaaaca ggggtagagg ataaagaaat gatgaaaaag tacggcaagt 540
 ccttttagaaa attactttca ctgtgtcttc agaaagatcc ttccaaaagg cccacagcag 600
 cagaactttt aaaatgcaaa ttcttccaga aagccaagaa cagagagtac ctgattgaga 660
 agctgcttac aagaacacca gacatagccc aaagagccaa aaaggtaaga agagttcctg 720
 ggtcaagtgg tcaccttcat aaaaccgaag acggggactg ggagtggagt gacgacgaga 780
 tggatgagaa gagcgaagaa gggaaagcag ctttttctca ggaaaagtca cgaagagtaa 840
 aagaagaaaa tccagagatt gcagtgagtg ccagcaccat cccgaacaa atacagtccc 900
 tctctgtgca cgactctcag ggcccaccca atgctaataga agactacaga gaagcttctt 960
 cttgtgccgt gaacctcggt ttgagattaa gaaactccag aaagggaactt aatgacatac 1020
 gatttgagtt tactccagga agagatacag cagatgggtgt atctcaggag ctcttctctg 1080
 ctggccttggg ggatgggtcac gatgtagtta tagtggctgc taatttacag aagattgtag 1140
 atgatcccaa agctttaaaa acattgacat ttaagttggc ttctggctgt gatgggtcgg 1200
 agattcctga tgaagtgaag ctgattgggt ttgtcagtt gagtgtcagc tgatgtatgt 1260
 cccttgatgt caccctgatc tgtcatgcc caccgccacc cctactccct tcaaccctcc 1320

ctctttctgc ccatttcctc ccaccccctc actcccattt cctagcaaaa tcagaagatt	1380
gtgaagaggc cggtttcaac aaaatgggat aaaaaataa ttttttaaaa cttacaacac	1440
tccgagttct gctttattct ctagcaatcc acagtacaag aacaagcaaa tgccacagct	1500
gcacgactgt tgctcatttt tccaaaagct atttaatat cttagcaatc aatttggata	1560
tcccttaagt gaaaagaatc tgaaatacac tcaggtgggc ttattttattg gcaacaaaag	1620
gaattttcta tccagaagcc tattttctct ttcattggtg ttattttctgt tataatactt	1680
taattgtaca tctgacaata ctgcctcttt tatgttgtat ttagaaatta atatacttat	1740
aaaattaaga tttattagcc aaacttgaat tctagtttta aaactgactg tgaattttat	1800
ttttcatata tttatgcatt acacacctta gctataagaa aaaaagggtt ttgattatat	1860
gcttcttgca gttaatctcg ttattttaa acaaaagtttt gggctctgtct ttggagtatt	1920
tgtaacttct aaattttgaa atgactgaat taggaatttg gatgcttatt cttttagtct	1980
gtttgcctaa aaaccaattt acaatctgac tgtctcttgg gagagggagg tgccttgcaa	2040
actttcacat taagaatgtg cctgaggctg ctttactctg gaatagtctc agatctaaaa	2100
tttctctat ataagggtgc atatgttaag ttttgcttca ttggaccgtt tagaatgcta	2160
tgtaaaatgt tgccattctg ttagattgct aactatatac ccatctctga tttggctctc	2220
cttaagtgat aggatttggt attctaaagg tgataaaactt gaaaatatca gaatctgagt	2280
tttacttgaa attttgcaga ataccaggt ggagtgaaaa ttggaagggt tttgtgcaat	2340
gactaaaagg taaaacgtg ttaagggttca agaatacaata ctttcaaccc aagtagccct	2400
ctgcttgact gtatattatg gaactagtaa accttaggat tttgaaaatt ggagtcta	2460
ctttcaagga ggtgggctcc caggatggta ccattgctct ttcctagcta accctagata	2520
tggcagctct ttaatgtact tcaaaaagca aatatatatt actaaggaaa aaaagttatt	2580
tataattgcc ttgtcataat tgtaagggtg ttctagagcc atttgcatac aatttaatgt	2640
aatttcattc cattctattg tttacacaac gattactcga agatgactgc aaaggtaaaa	2700
ggaaaataaa agtgtattgc acaatgaaaa aa	2732

<210> 91
 <211> 1416
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> (1)..(1416)
<223> "n" may be any nucleotide 'a', 'c', 'g' or 't'

<400> 91
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tagcaacaat tottaaagag gttttggaag gcttagacta tctacacaga aacggtcaga 180
ttcacagggga tttgaaagct ggtaatatc ttctgggtga ggatgggttca gtacaaatag 240
cagattttgg ggtaagtgcg ttcttagcaa caggggggtga tgttaccga aataaagtaa 300
gaaaaacatt cgttggcacc ccatgttggga tggctcctga agtcatggaa caggtgagag 360
gctatgactt caaggtgac atgtggagtt ttggaataac tgccattgaa ttagcaacag 420
gagcagcgcc ttatcacaaa tatcctccca tgaaagtgtt aatgttgact ttgcaaaatg 480
atccaccacac tttggaaaca ggggtagagg ataaagaaat gatgaaaaag tacggcaagt 540
ccttttagaaa attactttca ctgtgtcttc agaaagatcc ttccaaaagg cccacagcag 600
cagaactttt aaaatgcaaa ttcttcaga aagccaagaa cagagagtac ctgattgaga 660
agctgcttac aagaacacca gacatagccc aaagagccaa aaaggtaaga agagttcctg 720
ggcgaagtgg tcaccttcat aaaaccgaag acggggactg ggagtggagt gacgacgaga 780
tggatgagaa gagcgaagaa gggaaagcag ctttttctca ggaaaagtca cgaagagtaa 840
aagaagaaaa tccagagatt gcagtgagtg ccagcaccat cccgaacaa atacagtccc 900
tctctgtgca cgactctcag ggcccacca atgctaataga agactacaga gaagcttctt 960
cttgtgcoct gaacctcgtt ttgagattaa gaaactccag aaaggaaactt aatgacatac 1020
gatttgagtt tactccagga agagatacag cagatgggtg atctcaggag ctcttctctg 1080
ctggcttggt ggatggtcac gatgtagtta tagtggctgc taatttacag aagattgtag 1140
atgatcccaa agctttaaaa acattgacat ttaagttgaa tcaatttttg catttggaag 1200
catttgactc tgcagcgta gggaaacgttt tctgattgtg actggaagtg tcctcttcta 1260
tgagcatagc tttttcttat cgtcacacct ttgactaaga gcggccatat aagaatcttg 1320
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ctgaattcaa agcaaacactc ttaataaagc tttcct 1416

<210> 92
<211> 434
<212> PRT

<213> Homosapiens

<400> 92

Met	Pro	Ala	Arg	Arg	Leu	Leu	Leu	Leu	Leu	Thr	Leu	Leu	Leu	Pro	Gly	
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Leu	Gly	Ile	Phe	Gly	Ser	Thr	Ser	Thr	Val	Thr	Leu	Pro	Glu	Thr	Leu	
			20					25					30			
Leu	Phe	Val	Ser	Thr	Leu	Asp	Gly	Ser	Leu	His	Ala	Val	Ser	Lys	Arg	
			35				40					45				
Thr	Gly	Ser	Ile	Lys	Trp	Thr	Leu	Lys	Glu	Asp	Pro	Val	Leu	Gln	Val	
	50					55					60					
Pro	Thr	His	Val	Glu	Glu	Pro	Ala	Phe	Leu	Pro	Asp	Pro	Asn	Asp	Gly	
65					70					75					80	
Ser	Leu	Tyr	Thr	Leu	Gly	Ser	Lys	Asn	Asn	Glu	Gly	Leu	Thr	Lys	Leu	
				85					90					95		
Pro	Phe	Thr	Ile	Pro	Glu	Leu	Val	Gln	Ala	Ser	Pro	Cys	Arg	Ser	Ser	
			100						105				110			
Asp	Gly	Ile	Leu	Tyr	Met	Gly	Lys	Lys	Gln	Asp	Ile	Trp	Tyr	Val	Ile	
		115					120					125				
Asp	Leu	Leu	Thr	Gly	Glu	Lys	Gln	Gln	Thr	Leu	Ser	Ser	Ala	Phe	Ala	
	130					135						140				
Asp	Ser	Leu	Cys	Pro	Ser	Thr	Ser	Leu	Leu	Tyr	Leu	Gly	Arg	Thr	Glu	
145					150					155					160	
Tyr	Thr	Ile	Thr	Met	Tyr	Asp	Thr	Lys	Thr	Arg	Glu	Leu	Arg	Trp	Asn	
				165					170					175		
Ala	Thr	Tyr	Phe	Asp	Tyr	Ala	Ala	Ser	Leu	Pro	Glu	Asp	Glu	Gly	Asp	
			180					185					190			
Tyr	Lys	Met	Ser	His	Phe	Val	Ser	Asn	Gly	Asp	Gly	Leu	Val	Val	Thr	
		195					200					205				
Val	Asp	Ser	Glu	Ser	Gly	Asp	Val	Leu	Trp	Ile	Gln	Asn	Tyr	Ala	Ser	
	210					215					220					
Pro	Val	Val	Ala	Phe	Tyr	Val	Trp	Gln	Arg	Glu	Gly	Leu	Arg	Lys	Val	
225					230					235					240	
Met	His	Ile	Asn	Val	Ala	Val	Glu	Thr	Leu	Arg	Tyr	Leu	Thr	Phe	Met	
			245						250					255		
Ser	Gly	Glu	Val	Gly	Arg	Ile	Thr	Lys	Trp	Lys	Tyr	Pro	Phe	Pro	Lys	
			260					265					270			
Glu	Thr	Glu	Ala	Lys	Ser	Lys	Leu	Thr	Pro	Thr	Leu	Tyr	Val	Gly	Lys	
		275					280					285				

Tyr Ser Thr Ser Leu Tyr Ala Ser Pro Ser Met Val His Glu Gly Val
 290 295 300
 Ala Val Val Pro Arg Gly Ser Thr Leu Pro Leu Leu Glu Gly Pro Gln
 305 310 315 320
 Thr Asp Gly Val Thr Ile Gly Asp Lys Gly Glu Cys Val Ile Thr Pro
 325 330 335
 Ser Thr Asp Val Lys Phe Asp Pro Gly Leu Lys Ser Lys Asn Lys Leu
 340 345 350
 Asn Tyr Leu Arg Asn Tyr Trp Leu Leu Ile Gly His His Glu Thr Pro
 355 360 365
 Leu Ser Ala Ser Thr Lys Met Leu Glu Arg Phe Pro Asn Asn Leu Pro
 370 375 380
 Lys His Arg Glu Asn Val Ile Pro Ala Asp Ser Glu Lys Lys Ser Phe
 385 390 395 400
 Glu Glu Thr Leu Leu Gln Met Thr Ser Val Phe Ser Trp Ile Leu Asn
 405 410 415
 Leu Pro Ser Lys Glu Glu Val Phe Ala Phe Leu Arg Ile Phe Glu Lys
 420 425 430

Asn Met

<210> 93
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 93

Met Tyr Ser Leu Gln Leu Gln Ser Val Ser Ser Ala Ile His Leu Cys
 1 5 10 15
 Asp Lys Lys Lys Met Glu Leu Ser Leu Asn Ile Pro Val Asn His Gly
 20 25 30
 Pro Gln Glu Glu Ser Cys Gly Ser Ser Gln Leu His Glu Asn Ser Gly
 35 40 45
 Ser Pro Glu Thr Ser Arg Ser Leu Pro Ala Pro Gln Asp Asn Asp Phe
 50 55 60
 Leu Ser Arg Lys Ala Gln Asp Cys Tyr Phe Met Lys Leu His His Cys
 65 70 75 80
 Pro Gly Asn His Ser Trp Asp Ser Thr Ile Ser Gly Ser Gln Arg Ala
 85 90 95
 Ala Phe Cys Asp His Lys Thr Thr Pro Cys Ser Ser Ala Ile Ile Asn

100					105					110						
Pro	Leu	Ser	Thr	Ala	Gly	Asn	Ser	Glu	Arg	Leu	Gln	Pro	Gly	Ile	Ala	
115					120					125						
Gln	Gln	Trp	Ile	Gln	Ser	Lys	Arg	Glu	Asp	Ile	Val	Asn	Gln	Met	Thr	
130					135					140						
Glu	Ala	Cys	Leu	Asn	Gln	Ser	Leu	Asp	Ala	Leu	Leu	Ser	Arg	Asp	Leu	
145					150					155					160	
Ile	Met	Lys	Glu	Asp	Tyr	Glu	Leu	Val	Ser	Thr	Lys	Pro	Thr	Arg	Thr	
165					170					175						
Ser	Lys	Val	Arg	Gln	Leu	Leu	Asp	Thr	Thr	Asp	Ile	Gln	Gly	Glu	Glu	
180					185					190						
Phe	Ala	Lys	Val	Ile	Val	Gln	Lys	Leu	Lys	Asp	Asn	Lys	Gln	Met	Gly	
195					200					205						
Leu	Gln	Pro	Tyr	Pro	Glu	Ile	Leu	Val	Val	Ser	Arg	Ser	Pro	Ser	Leu	
210					215					220						
Asn	Leu	Leu	Gln	Asn	Lys	Ser	Met									
225					230											

<210> 94
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 94

Met	Ala	Asp	Leu	Glu	Ala	Val	Leu	Ala	Asp	Val	Ser	Tyr	Leu	Met	Ala
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Met	Glu	Lys	Ser	Lys	Ala	Thr	Pro	Ala	Ala	Arg	Ala	Ser	Lys	Lys	Ile
20			25			30									
Leu	Leu	Pro	Glu	Pro	Ser	Ile	Arg	Ser	Val	Met	Gln	Lys	Tyr	Leu	Glu
35			40			45									
Asp	Arg	Gly	Glu	Val	Thr	Phe	Glu	Lys	Ile	Phe	Ser	Gln	Lys	Leu	Gly
50			55			60									
Tyr	Leu	Leu	Phe	Arg	Asp	Phe	Cys	Leu	Asn	His	Leu	Glu	Glu	Ala	Arg
65			70			75			80						
Pro	Leu	Val	Glu	Phe	Tyr	Glu	Glu	Ile	Lys	Lys	Tyr	Glu	Lys	Leu	Glu
85			90			95									
Thr	Glu	Glu	Glu	Arg	Val	Ala	Arg	Ser	Arg	Glu	Ile	Phe	Asp	Ser	Tyr
100			105			110									
Ile	Met	Lys	Glu	Leu	Leu	Ala	Cys	Ser	His	Pro	Phe	Ser	Lys	Ser	Ala
115			120			125									

Thr Glu His Val Gln Gly His Leu Gly Lys Lys Gln Val Pro Pro Asp
 130 135 140

Leu Phe Gln Pro Tyr Ile Glu Glu Ile Cys Gln Asn Leu Arg Gly Asp
 145 150 155 160

Val Phe Gln Lys Phe Ile Glu Arg Val Ala Leu Ala Ala Gly Ala Ala
 165 170 175

Thr Leu Pro Ala Val Pro Ser Cys Pro Asn Pro Gln His Pro Gly Ser
 180 185 190

Gly Thr Thr Ala Arg His Leu Gln Val Gly Pro Tyr Trp Pro Arg Leu
 195 200 205

Ala

<210> 95
 <211> 454
 <212> PRT
 <213> Homo sapiens

<400> 95

Met Gly Leu Val Ser Ser Lys Lys Pro Asp Lys Glu Lys Pro Ile Lys
 1 5 10 15

Glu Lys Asp Lys Gly Gln Trp Ser Pro Leu Lys Val Ser Ala Gln Asp
 20 25 30

Lys Asp Ala Pro Pro Leu Pro Pro Leu Val Val Phe Asn His Leu Thr
 35 40 45

Pro Pro Pro Pro Asp Glu His Leu Asp Glu Asp Lys His Phe Val Val
 50 55 60

Ala Leu Tyr Asp Tyr Thr Ala Met Asn Asp Arg Asp Leu Gln Met Leu
 65 70 75 80

Lys Gly Glu Lys Leu Gln Val Leu Lys Gly Thr Gly Asp Trp Trp Leu
 85 90 95

Ala Arg Ser Leu Val Thr Gly Arg Glu Gly Tyr Val Pro Ser Asn Phe
 100 105 110

Val Ala Arg Val Glu Ser Leu Glu Met Glu Arg Trp Phe Phe Arg Ser
 115 120 125

Gln Gly Arg Lys Glu Ala Glu Arg Gln Leu Leu Ala Pro Ile Asn Lys
 130 135 140

Ala Gly Ser Phe Leu Ile Arg Glu Ser Glu Thr Asn Lys Gly Ala Phe
 145 150 155 160

Ser Leu Ser Val Lys Asp Val Thr Thr Gln Gly Glu Leu Ile Lys His
 165 170 175

Tyr Lys Ile Arg Cys Leu Asp Glu Gly Gly Tyr Tyr Ile Ser Pro Arg
 180 185 190
 Ile Thr Phe Pro Ser Leu Gln Ala Leu Val Gln His Tyr Ser Ser Tyr
 195 200 205
 Tyr Lys Asn Asn Met Lys Val Ala Ile Lys Thr Leu Lys Glu Gly Thr
 210 215 220
 Met Ser Pro Glu Ala Phe Leu Gly Glu Ala Asn Val Met Lys Ala Leu
 225 230 235 240
 Gln His Glu Arg Leu Val Arg Leu Tyr Ala Val Val Thr Lys Glu Pro
 245 250 255
 Ile Tyr Ile Val Thr Glu Tyr Met Ala Arg Gly Cys Leu Leu Asp Phe
 260 265 270
 Leu Lys Thr Asp Glu Gly Ser Arg Leu Ser Leu Pro Arg Leu Ile Asp
 275 280 285
 Met Ser Ala Gln Ile Ala Glu Gly Met Ala Tyr Ile Glu Arg Met Asn
 290 295 300
 Ser Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val Ser Glu Ala
 305 310 315 320
 Leu Cys Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Ile Ile Asp Ser
 325 330 335
 Glu Tyr Thr Ala Gln Glu Gly Ala Lys Phe Pro Ile Lys Trp Thr Ala
 340 345 350
 Pro Glu Ala Ile His Phe Gly Val Phe Thr Ile Lys Ala Asp Val Trp
 355 360 365
 Ser Phe Gly Val Leu Leu Met Glu Val Val Thr Tyr Gly Arg Val Pro
 370 375 380
 Tyr Pro Gly Met Ser Asn Pro Glu Val Ile Arg Asn Leu Glu Arg Gly
 385 390 395 400
 Tyr Arg Met Pro Arg Pro Asp Thr Cys Pro Pro Glu Leu Tyr Arg Gly
 405 410 415
 Val Ile Ala Glu Cys Trp Arg Ser Arg Pro Glu Glu Arg Pro Thr Phe
 420 425 430
 Glu Phe Leu Gln Ser Val Leu Glu Asp Phe Tyr Thr Ala Thr Glu Arg
 435 440 445
 Gln Tyr Glu Leu Gln Pro
 450

<210> 96

<211> 82

<212> PRT
<213> Homo sapiens

<400> 96

Met Glu Asn Phe Gln Lys Val Glu Lys Ile Gly Glu Gly Thr Tyr Gly
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Val Val Tyr Lys Ala Arg Asn Lys Leu Thr Gly Glu Val Val Ala Leu
20 25 30
Lys Lys Ile Arg Leu Asp Thr Glu Thr Glu Gly Val Pro Ser Thr Ala
35 40 45
Ile Arg Glu Ile Ser Leu Leu Lys Glu Leu Asn His Pro Asn Ile Val
50 55 60
Lys Leu Leu Asp Val Ile His Thr Glu Asn Lys Asn Ile Ser Leu Lys
65 70 75 80
Glu Gly

<210> 97
<211> 118
<212> PRT
<213> Homo sapiens

<400> 97

Met Thr Arg Asp Glu Ala Leu Pro Asp Ser His Ser Ala Gln Asp Phe
1 5 10 15
Tyr Glu Asn Tyr Glu Pro Lys Glu Ile Leu Gly Arg Gly Val Ser Ser
20 25 30
Val Val Arg Arg Cys Ile His Lys Pro Thr Ser Gln Glu Tyr Ala Val
35 40 45
Lys Val Ile Asp Val Thr Gly Gly Gly Ser Phe Ser Pro Glu Glu Val
50 55 60
Arg Glu Leu Arg Glu Ala Thr Leu Lys Glu Val Asp Ile Leu Arg Lys
65 70 75 80
Val Ser Gly His Pro Asn Ile Ser Ile Gln Leu Lys Asp Thr Tyr Glu
85 90 95
Thr Asn Thr Phe Phe Phe Leu Val Phe Asp Leu Met Lys Arg Gly Glu
100 105 110
Leu Phe Asp Leu Pro His
115

<210> 98
<211> 167
<212> PRT

<213> Homo sapiens

<400> 98

Val Phe Leu Gly Arg Cys Arg Ser Val Lys Glu Phe Glu Lys Leu Asn
1 5 10 15
Arg Ile Gly Glu Gly Thr Tyr Gly Ile Val Tyr Arg Ala Arg Asp Thr
20 25 30
Gln Thr Asp Glu Ile Val Ala Leu Lys Lys Val Arg Met Asp Lys Glu
35 40 45
Lys Asp Gly Ile Pro Ile Ser Ser Leu Arg Glu Ile Thr Leu Leu Leu
50 55 60
Arg Leu Arg His Pro Asn Ile Val Glu Leu Lys Glu Val Val Val Gly
65 70 75 80
Asn His Leu Glu Ser Ile Phe Leu Val Met Gly Tyr Cys Glu Gln Asp
85 90 95
Leu Ala Ser Leu Leu Glu Asn Met Pro Thr Pro Phe Ser Glu Ala Gln
100 105 110
Val Lys Cys Ile Val Leu Gln Val Leu Arg Gly Leu Gln Tyr Leu His
115 120 125
Arg Asn Phe Ile Ile His Arg Asp Leu Lys Val Ser Asn Leu Leu Met
130 135 140
Thr Asp Lys Gly Cys Val Lys Thr Gly Gly Cys Asn Leu Gly Gln Ala
145 150 155 160
Trp Ser Leu Asp Gly Thr Trp
165

<210> 99

<211> 141

<212> PRT

<213> Homo sapiens

<400> 99

Met Ser Ser Ala Gly Gly Val Ser Arg Arg Leu Ala Ala Val Arg Ser
1 5 10 15
Thr Val Leu Cys Arg Ala Val Gly Cys Ile Leu Ala Glu Leu Leu Ala
20 25 30
His Arg Pro Leu Leu Pro Gly Thr Ser Glu Ile His Gln Ile Asp Leu
35 40 45
Ile Val Gln Leu Leu Gly Thr Pro Ser Glu Asn Ile Trp Pro Gly Phe
50 55 60
Ser Lys Leu Pro Leu Val Gly Gln Tyr Ser Leu Arg Lys Gln Pro Tyr

65		70		75		80									
Asn	Asn	Leu	Lys	His	Lys	Phe	Pro	Trp	Leu	Ser	Glu	Ala	Gly	Leu	Arg
			85					90						95	
Leu	Leu	His	Phe	Leu	Phe	Met	Tyr	Asp	Pro	Lys	Lys	Arg	Ala	Thr	Ala
		100					105					110			
Gly	Asp	Cys	Leu	Glu	Ser	Ser	Tyr	Phe	Lys	Glu	Lys	Pro	Leu	Arg	Leu
	115						120					125			
Pro	Ile	Ser	Gly	Val	Cys	Glu	Gly	Cys	Arg	Glu	Pro	Gly			
	130					135					140				

<210> 100
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 100

Val	Phe	Leu	Gly	Arg	Cys	Arg	Ser	Val	Lys	Glu	Phe	Glu	Lys	Leu	Asn
1			5					10						15	
Arg	Ile	Gly	Glu	Gly	Thr	Tyr	Gly	Ile	Val	Tyr	Arg	Ala	Arg	Asp	Thr
		20					25					30			
Gln	Thr	Asp	Glu	Ile	Val	Ala	Leu	Lys	Lys	Val	Arg	Met	Asp	Lys	Glu
	35					40					45				
Lys	Asp	Gly	Ile	Pro	Ile	Ser	Ser	Leu	Arg	Glu	Ile	Thr	Leu	Leu	Leu
	50				55					60					
Arg	Leu	Arg	His	Pro	Asn	Ile	Leu	Pro	Ala	Arg	Ala	Pro	Trp	Lys	Gly
65				70				75						80	
Arg	Ser	Gly	Gly	Ser	Ile	Arg	Gly	Cys	Arg	Gly	Leu	Met	Trp	Ser	Ser
			85				90						95		
Ser	Leu	Cys	Trp	Lys	Cys	Ala	Thr	Thr	Ala	Ser	Trp	Glu	Glu	Trp	Trp
		100					105					110			

Val Gln Ser Pro Arg Cys Leu
 115

<210> 101
 <211> 756
 <212> PRT
 <213> Homo sapiens

<400> 101

Met	Gly	Glu	Ala	Glu	Lys	Phe	His	Tyr	Ile	Tyr	Ser	Cys	Asp	Leu	Asp
1			5					10						15	
Ile	Asn	Val	Gln	Leu	Lys	Ile	Gly	Ser	Leu	Glu	Gly	Lys	Arg	Glu	Gln
		20					25					30			

Lys	Ser	Tyr	Lys	Ala	Val	Leu	Glu	Asp	Pro	Met	Leu	Lys	Phe	Ser	Gly	35	40	45
Leu	Tyr	Gln	Glu	Thr	Cys	Ser	Asp	Leu	Tyr	Val	Thr	Cys	Gln	Val	Phe	50	55	60
Ala	Glu	Gly	Lys	Pro	Leu	Ala	Leu	Pro	Val	Arg	Thr	Ser	Tyr	Lys	Ala	65	70	75
Phe	Ser	Thr	Arg	Trp	Asn	Trp	Asn	Glu	Trp	Leu	Lys	Leu	Pro	Val	Lys	85	90	95
Tyr	Pro	Asp	Leu	Pro	Arg	Asn	Ala	Gln	Val	Ala	Leu	Thr	Ile	Trp	Asp	100	105	110
Val	Tyr	Gly	Pro	Gly	Lys	Ala	Val	Pro	Val	Gly	Gly	Thr	Thr	Val	Ser	115	120	125
Leu	Phe	Gly	Lys	Tyr	Gly	Met	Phe	Arg	Gln	Gly	Met	His	Asp	Leu	Lys	130	135	140
Val	Trp	Pro	Asn	Val	Glu	Ala	Asp	Gly	Ser	Glu	Pro	Thr	Lys	Thr	Pro	145	150	155
Gly	Arg	Thr	Ser	Ser	Thr	Leu	Ser	Glu	Asp	Gln	Met	Ser	Arg	Leu	Ala	165	170	175
Lys	Leu	Thr	Lys	Ala	His	Arg	Gln	Gly	His	Met	Val	Lys	Val	Asp	Trp	180	185	190
Leu	Asp	Arg	Leu	Thr	Phe	Arg	Glu	Ile	Glu	Met	Ile	Asn	Glu	Ser	Val	195	200	205
Lys	Arg	Ser	Ser	Asn	Phe	Met	Tyr	Leu	Met	Gly	Gly	Phe	Arg	Cys	Val	210	215	220
Lys	Cys	Asp	Asp	Lys	Glu	Tyr	Gly	Ile	Val	Tyr	Tyr	Glu	Lys	Asp	Gly	225	230	235
Asp	Glu	Ser	Ser	Pro	Ile	Leu	Thr	Ser	Phe	Glu	Leu	Val	Lys	Val	Pro	245	250	255
Asp	Pro	Gln	Met	Ser	Leu	Glu	Asn	Leu	Val	Glu	Ser	Lys	His	His	Asn	260	265	270
Leu	Pro	Arg	Ser	Leu	Arg	Ser	Gly	Pro	Ser	Asp	His	Asp	Leu	Lys	Pro	275	280	285
Tyr	Pro	Ser	Pro	Arg	Asp	Gln	Leu	Lys	Asn	Ile	Val	Ser	Tyr	Pro	Pro	290	295	300
Ser	Lys	Pro	Pro	Thr	Tyr	Glu	Glu	Gln	Asp	Leu	Val	Trp	Glu	Phe	Arg	305	310	315
Tyr	Tyr	Leu	Thr	Asn	Gln	Asp	Lys	Ala	Leu	Thr	Lys	Ile	Leu	Thr	Ser	325	330	335

Val	Ile	Trp	Asp	Leu	Pro	Gln	Glu	Ala	Lys	Gln	Ala	Leu	Ala	Leu	Leu	
			340					345					350			
Gly	Lys	Trp	Asn	Pro	Met	Asp	Val	Glu	Asp	Ser	Leu	Glu	Leu	Ile	Ser	
			355				360					365				
Ser	His	Tyr	Thr	Asn	Pro	Thr	Val	Arg	Arg	Tyr	Ala	Val	Ala	Arg	Leu	
	370					375					380					
Arg	Gln	Ala	Asp	Asp	Glu	Asp	Leu	Leu	Met	Tyr	Leu	Leu	Gln	Leu	Val	
385					390					395					400	
Gln	Ala	Leu	Lys	Tyr	Glu	Asn	Phe	Asp	Asp	Ile	Lys	Asn	Gly	Leu	Glu	
			405						410					415		
Pro	Thr	Lys	Lys	Asp	Ser	Gln	Ser	Ser	Val	Ser	Glu	Asn	Val	Ser	Asn	
			420					425					430			
Ser	Gly	Ile	Asn	Ser	Ala	Glu	Ile	Asp	Ser	Ser	Gln	Ile	Ile	Thr	Ser	
	435						440					445				
Pro	Leu	Pro	Ser	Val	Ser	Ser	Pro	Pro	Pro	Ala	Ser	Lys	Thr	Lys	Glu	
	450					455					460					
Val	Pro	Asp	Gly	Glu	Asn	Leu	Glu	Gln	Asp	Leu	Cys	Thr	Phe	Leu	Ile	
465					470					475					480	
Ser	Arg	Ala	Cys	Lys	Asn	Ser	Thr	Leu	Ala	Asn	Tyr	Leu	Tyr	Trp	Tyr	
			485						490					495		
Val	Ile	Val	Glu	Cys	Glu	Asp	Gln	Asp	Thr	Gln	Gln	Arg	Asp	Pro	Lys	
			500					505					510			
Thr	His	Glu	Met	Tyr	Leu	Asn	Val	Met	Arg	Arg	Phe	Ser	Gln	Ala	Leu	
	515						520					525				
Leu	Lys	Gly	Asp	Lys	Ser	Val	Arg	Val	Met	Arg	Ser	Leu	Leu	Ala	Ala	
	530					535					540					
Gln	Gln	Thr	Phe	Val	Asp	Arg	Leu	Val	His	Leu	Met	Lys	Ala	Val	Gln	
545					550					555					560	
Arg	Glu	Ser	Gly	Asn	Arg	Lys	Lys	Lys	Asn	Glu	Arg	Leu	Gln	Ala	Leu	
			565						570					575		
Leu	Gly	Asp	Asn	Glu	Lys	Met	Asn	Leu	Ser	Asp	Val	Glu	Leu	Ile	Pro	
		580						585					590			
Leu	Pro	Leu	Glu	Pro	Gln	Val	Lys	Ile	Arg	Gly	Ile	Ile	Pro	Glu	Thr	
	595						600					605				
Ala	Thr	Leu	Phe	Lys	Ser	Ala	Leu	Met	Pro	Ala	Gln	Leu	Phe	Phe	Lys	
	610					615					620					
Thr	Glu	Asp	Gly	Gly	Lys	Tyr	Pro	Val	Ile	Phe	Lys	His	Gly	Asp	Asp	
625					630					635					640	

Leu Arg Gln Asp Gln Leu Ile Leu Gln Ile Ile Ser Leu Met Asp Lys
645 650 655

Leu Leu Arg Lys Glu Asn Leu Asp Leu Lys Leu Thr Pro Tyr Lys Val
660 665 670

Leu Ala Thr Ser Thr Lys His Gly Phe Met Gln Phe Ile Gln Ser Val
675 680 685

Pro Val Ala Glu Val Leu Asp Thr Glu Gly Ser Ile Gln Asn Phe Phe
690 695 700

Arg Lys Tyr Ala Pro Ser Glu Asn Gly Pro Asn Gly Ile Ser Ala Glu
705 710 715 720

Val Met Asp Thr Tyr Val Lys Ser Cys Ala Gly Tyr Cys Val Ile Thr
725 730 735

Tyr Ile Leu Gly Val Gly Asp Arg His Leu Asp Asn Leu Leu Leu Thr
740 745 750

Lys Thr Gly Gly
755

<210> 102
<211> 508
<212> PRT
<213> Homo sapiens

<400> 102

Met Gly Glu Ala Glu Lys Phe His Tyr Ile Tyr Ser Cys Asp Leu Asp
1 5 10 15

Ile Asn Val Gln Leu Lys Ile Gly Ser Leu Glu Gly Lys Arg Glu Gln
20 25 30

Lys Ser Tyr Lys Ala Val Leu Glu Asp Pro Met Leu Lys Phe Ser Gly
35 40 45

Leu Tyr Gln Glu Thr Cys Ser Asp Leu Tyr Val Thr Cys Gln Val Phe
50 55 60

Ala Glu Gly Lys Pro Leu Ala Leu Pro Val Arg Thr Ser Tyr Lys Ala
65 70 75 80

Phe Ser Thr Arg Trp Asn Trp Asn Glu Trp Leu Lys Leu Pro Val Lys
85 90 95

Tyr Pro Asp Leu Pro Arg Asn Ala Gln Val Ala Leu Thr Ile Trp Asp
100 105 110

Val Tyr Gly Pro Gly Lys Ala Val Pro Val Gly Gly Thr Thr Val Ser
115 120 125

Leu Phe Gly Lys Tyr Gly Met Phe Arg Gln Gly Met His Asp Leu Lys

130				135				140							
Val	Trp	Pro	Asn	Val	Glu	Ala	Asp	Gly	Ser	Glu	Pro	Thr	Lys	Thr	Pro
145					150					155					160
Gly	Arg	Thr	Ser	Ser	Thr	Leu	Ser	Glu	Asp	Gln	Met	Ser	Arg	Leu	Ala
				165					170					175	
Lys	Leu	Thr	Lys	Ala	His	Arg	Gln	Gly	His	Met	Val	Lys	Val	Asp	Trp
			180						185					190	
Leu	Asp	Arg	Leu	Thr	Phe	Arg	Glu	Ile	Glu	Met	Ile	Asn	Glu	Ser	Val
	195						200					205			
Lys	Arg	Ser	Ser	Asn	Phe	Met	Tyr	Leu	Met	Gly	Gly	Phe	Arg	Cys	Val
	210					215						220			
Lys	Cys	Asp	Asp	Lys	Glu	Tyr	Gly	Ile	Val	Tyr	Tyr	Glu	Lys	Asp	Gly
225					230					235					240
Asp	Glu	Ser	Ser	Pro	Ile	Leu	Thr	Ser	Phe	Glu	Leu	Val	Lys	Val	Pro
				245					250						255
Asp	Pro	Gln	Met	Ser	Leu	Glu	Asn	Leu	Val	Glu	Ser	Lys	His	His	Asn
			260					265					270		
Leu	Pro	Arg	Ser	Leu	Arg	Ser	Gly	Pro	Ser	Asp	His	Asp	Leu	Lys	Pro
	275						280					285			
Tyr	Pro	Ser	Pro	Arg	Asp	Gln	Leu	Lys	Asn	Ile	Val	Ser	Tyr	Pro	Pro
	290					295					300				
Ser	Lys	Pro	Pro	Thr	Tyr	Glu	Glu	Gln	Asp	Leu	Val	Trp	Glu	Phe	Arg
305					310					315					320
Tyr	Tyr	Leu	Thr	Asn	Gln	Asp	Lys	Ala	Leu	Thr	Lys	Ile	Leu	Thr	Ser
				325					330					335	
Val	Ile	Trp	Asp	Leu	Pro	Gln	Glu	Ala	Lys	Gln	Ala	Leu	Ala	Leu	Leu
			340					345					350		
Gly	Lys	Trp	Asn	Pro	Met	Asp	Val	Glu	Asp	Ser	Leu	Glu	Leu	Ile	Ser
		355					360					365			
Ser	His	Tyr	Thr	Asn	Pro	Thr	Val	Arg	Arg	Tyr	Ala	Val	Ala	Arg	Leu
	370					375					380				
Arg	Gln	Ala	Asp	Asp	Glu	Asp	Leu	Leu	Met	Tyr	Leu	Leu	Gln	Leu	Val
385					390					395					400
Gln	Ala	Leu	Lys	Tyr	Glu	Asn	Phe	Asp	Asp	Ile	Lys	Asn	Gly	Leu	Glu
			405						410					415	
Pro	Thr	Lys	Lys	Asp	Ser	Gln	Ser	Ser	Val	Ser	Glu	Asn	Val	Ser	Asn
			420					425					430		
Ser	Gly	Ile	Asn	Ser	Ala	Glu	Ile	Asp	Ser	Ser	Gln	Ile	Ile	Thr	Ser

435					440					445									
Pro	Leu	Pro	Ser	Val	Ser	Ser	Pro	Pro	Pro	Ala	Ser	Lys	Thr	Lys	Glu				
450					455					460									
Val	Pro	Asp	Gly	Glu	Asn	Leu	Glu	Gln	Asp	Leu	Cys	Thr	Phe	Leu	Ile				
465					470					475					480				
Ser	Arg	Ala	Cys	Lys	Asn	Ser	Thr	Leu	Ala	Asn	Tyr	Leu	Tyr	Trp	Tyr				
485					490					495									
Val	Lys	Ile	Ile	Phe	Cys	Leu	Phe	Ser	Tyr	Tyr	Pro								
500					505														

<210> 103
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 103

Met	Gly	Asn	Ala	Ala	Ala	Lys	Lys	Gly	Ser	Glu	Gln	Glu	Ser	Val	
1			5					10					15		
Lys	Glu	Phe	Leu	Ala	Lys	Ala	Lys	Glu	Asp	Phe	Leu	Lys	Lys	Trp	Glu
			20					25					30		
Ser	Pro	Ala	Gln	Asn	Thr	Ala	His	Leu	Asp	Gln	Phe	Glu	Arg	Ile	Lys
			35				40					45			
Thr	Leu	Gly	Thr	Gly	Ser	Phe	Gly	Arg	Val	Met	Leu	Val	Lys	His	Lys
			50			55					60				
Glu	Thr	Gly	Asn	His	Tyr	Ala	Met	Lys	Ile	Leu	Asp	Lys	Gln	Lys	Val
65				70					75						80
Val	Lys	Leu	Lys	Gln	Ile	Glu	His	Thr	Leu	Asn	Glu	Lys	Arg	Ile	Leu
				85					90					95	
Gln	Ala	Val	Asn	Phe	Pro	Phe	Leu	Val	Lys	Leu	Glu	Phe	Ser	Phe	Lys
			100					105					110		
Asp	Asn	Ser	Asn	Leu	Tyr	Met	Val	Met	Glu	Tyr	Val	Pro	Gly	Gly	Glu
			115				120					125			
Met	Phe	Ser	His	Leu	Arg	Arg	Ile	Gly	Arg	Phe	Arg				
			130			135					140				

<210> 104
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 104

Met	Val	Val	Phe	Asn	Gly	Leu	Leu	Lys	Ile	Lys	Ile	Cys	Glu	Ala	Val
1				5					10					15	

Ser Leu Lys Pro Thr Ala Trp Ser Leu Arg His Ala Val Gly Pro Arg
20 25 30

Pro Gln Thr Phe Leu Leu Asp Pro Tyr Ile Ala Leu Asn Val Asp Asp
35 40 45

Ser Arg Ile Gly Gln Thr Ala Thr Lys Gln Lys Thr Asn Ser Pro Ala
50 55 60

Trp His Asp Glu Phe Val Thr Asp Val Cys Asn Gly Arg Lys Ile Glu
65 70 75 80

Leu Ala Val Phe His Asp Ala Pro Ile Gly Tyr Asp Asp Phe Val Ala
85 90 95

Asn Cys Thr Ile Gln Phe Glu Glu Leu Leu Gln Asn Gly Ser Arg His
100 105 110

Phe Glu Asp Trp Ile Asp Leu Glu Pro Glu Gly Arg Val Tyr Val Ile
115 120 125

Ile Asp Leu Ser Gly Ser Ser Gly Glu Val Lys Ile Pro Asn Ser Ala
130 135 140

Phe Cys Glu Arg Glu Arg Val Glu Met Arg His Ser
145 150 155

<210> 105

<211> 520

<212> PRT

<213> Homo sapiens

<400> 105

Met Ile Leu Ile Pro Arg Met Leu Leu Val Leu Phe Leu Leu Leu Pro
1 5 10 15

Ile Leu Ser Ser Ala Lys Ala Gln Val Asn Pro Ala Ile Cys Arg Tyr
20 25 30

Pro Leu Gly Met Ser Gly Gly Gln Ile Pro Asp Glu Asp Ile Thr Ala
35 40 45

Ser Ser Gln Trp Ser Glu Ser Thr Ala Ala Lys Tyr Gly Arg Leu Asp
50 55 60

Ser Glu Glu Gly Asp Gly Ala Trp Cys Pro Glu Ile Pro Val Glu Pro
65 70 75 80

Asp Asp Leu Lys Glu Phe Leu Gln Ile Asp Leu His Thr Leu His Phe
85 90 95

Ile Thr Leu Val Gly Thr Gln Gly Arg His Ala Gly Gly His Gly Ile
100 105 110

Glu Phe Ala Pro Met Tyr Lys Ile Asn Tyr Ser Arg Asp Gly Thr Arg

115					120					125						
Trp	Ile	Ser	Trp	Arg	Asn	Arg	His	Gly	Lys	Gln	Val	Leu	Asp	Gly	Asn	
130					135					140						
Ser	Asn	Pro	Tyr	Asp	Ile	Phe	Leu	Lys	Asp	Leu	Glu	Pro	Pro	Ile	Val	
145					150					155					160	
Ala	Arg	Phe	Val	Arg	Phe	Ile	Pro	Val	Thr	Asp	His	Ser	Met	Asn	Val	
165					170					175						
Cys	Met	Arg	Val	Glu	Leu	Tyr	Gly	Cys	Val	Trp	Leu	Asp	Gly	Leu	Val	
180					185					190						
Ser	Tyr	Asn	Ala	Pro	Ala	Gly	Gln	Gln	Phe	Val	Leu	Pro	Gly	Gly	Ser	
195					200					205						
Ile	Ile	Tyr	Leu	Asn	Asp	Ser	Val	Tyr	Asp	Gly	Ala	Val	Gly	Tyr	Ser	
210					215					220						
Met	Thr	Glu	Gly	Leu	Gly	Gln	Leu	Thr	Asp	Gly	Val	Ser	Gly	Leu	Asp	
225					230					235					240	
Asp	Phe	Thr	Gln	Thr	His	Glu	Tyr	His	Val	Trp	Pro	Gly	Tyr	Asp	Tyr	
245					250					255						
Val	Gly	Trp	Arg	Asn	Glu	Ser	Ala	Thr	Asn	Gly	Tyr	Ile	Glu	Ile	Met	
260					265					270						
Phe	Glu	Phe	Asp	Arg	Ile	Arg	Asn	Phe	Thr	Thr	Met	Lys	Val	His	Cys	
275					280					285						
Asn	Asn	Met	Phe	Ala	Lys	Gly	Val	Lys	Ile	Phe	Lys	Glu	Val	Gln	Cys	
290					295					300						
Tyr	Phe	Arg	Ser	Glu	Ala	Ser	Glu	Trp	Glu	Pro	Asn	Ala	Ile	Ser	Phe	
305					310					315					320	
Pro	Leu	Val	Leu	Asp	Asp	Val	Asn	Pro	Ser	Ala	Arg	Phe	Val	Thr	Val	
325					330					335						
Pro	Leu	His	His	Arg	Met	Ala	Ser	Ala	Ile	Lys	Cys	Gln	Tyr	His	Phe	
340					345					350						
Ala	Asp	Thr	Trp	Met	Met	Phe	Ser	Glu	Ile	Thr	Phe	Gln	Ser	Asp	Ala	
355					360					365						
Ala	Met	Tyr	Asn	Asn	Ser	Glu	Ala	Leu	Pro	Thr	Ser	Pro	Met	Ala	Pro	
370					375					380						
Thr	Thr	Tyr	Asp	Pro	Met	Leu	Lys	Val	Asp	Asp	Ser	Asn	Thr	Arg	Ile	
385					390					395					400	
Leu	Ile	Gly	Cys	Leu	Val	Ala	Ile	Ile	Phe	Ile	Leu	Leu	Ala	Ile	Ile	
405					410					415						
Val	Ile	Ile	Leu	Trp	Arg	Gln	Phe	Trp	Gln	Lys	Met	Leu	Glu	Lys	Ala	

420				425				430							
Ser	Arg	Arg	Met	Leu	Asp	Asp	Glu	Met	Thr	Val	Ser	Leu	Ser	Leu	Pro
		435					440					445			
Ser	Asp	Ser	Ser	Met	Phe	Asn	Asn	Asn	Arg	Ser	Ser	Ser	Pro	Ser	Glu
	450					455					460				
Gln	Gly	Ser	Asn	Ser	Thr	Tyr	Asp	Arg	Ile	Phe	Pro	Leu	Arg	Pro	Asp
465					470					475					480
Tyr	Gln	Glu	Pro	Ser	Arg	Leu	Ile	Arg	Lys	Leu	Pro	Glu	Phe	Ala	Pro
				485					490					495	
Gly	Glu	Glu	Glu	Ser	Gly	Glu	Asp	Asp	Val	Val	Glu	Gln	Gly	Val	Lys
			500					505					510		
Gly	Glu	Thr	Ser	Ala	Ser	Ile	Arg								
		515					520								
<210>		106													
<211>		284													
<212>		PRT													
<213>		Homo sapiens													
<400>		106													
Met	Ala	Asn	Phe	Gln	Glu	His	Leu	Ser	Cys	Ser	Ser	Ser	Pro	His	Leu
1				5					10					15	
Pro	Phe	Ser	Glu	Ser	Lys	Thr	Phe	Asn	Gly	Leu	Gln	Asp	Glu	Leu	Thr
			20					25					30		
Ala	Met	Gly	Asn	His	Pro	Ser	Pro	Lys	Leu	Leu	Glu	Asp	Gln	Gln	Glu
		35					40					45			
Lys	Gly	Met	Val	Arg	Thr	Glu	Leu	Ile	Glu	Ser	Val	His	Ser	Pro	Val
	50					55					60				
Thr	Thr	Thr	Val	Leu	Thr	Ser	Val	Ser	Glu	Asp	Ser	Arg	Asp	Gln	Phe
65					70					75					80
Glu	Asn	Ser	Val	Leu	Gln	Leu	Arg	Glu	His	Asp	Glu	Ser	Glu	Thr	Ala
				85					90					95	
Val	Ser	Gln	Gly	Asn	Ser	Asn	Thr	Val	Asp	Gly	Glu	Ser	Thr	Ser	Gly
			100					105					110		
Thr	Glu	Asp	Ile	Lys	Ile	Gln	Phe	Ser	Arg	Ser	Gly	Ser	Gly	Ser	Gly
		115					120					125			
Gly	Phe	Leu	Glu	Gly	Leu	Phe	Gly	Cys	Leu	Arg	Pro	Val	Trp	Asn	Ile
	130					135					140				
Ile	Gly	Lys	Ala	Tyr	Ser	Thr	Asp	Tyr	Lys	Phe	Met	Gln	Gln	Asp	Thr
145					150					155					160

Trp Glu Val Pro Phe Glu Glu Ile Ser Glu Leu Gln Trp Leu Gly Ser
 165 170 175
 Gly Ala Gln Gly Ala Val Phe Leu Gly Lys Phe Arg Ala Glu Glu Val
 180 185 190
 Ala Ile Lys Lys Val Arg Glu Gln Asn Glu Thr Asp Ile Lys His Leu
 195 200 205
 Arg Lys Leu Lys His Pro Asn Ile Ile Ala Phe Lys Gly Val Cys Thr
 210 215 220
 Gln Ala Pro Cys Tyr Cys Ile Ile Met Glu Tyr Cys Ala His Gly Gln
 225 230 235 240
 Leu Tyr Glu Val Leu Arg Ala Gly Arg Lys Ile Thr Pro Arg Leu Leu
 245 250 255
 Val Asp Trp Ser Thr Gly Ile Ala Ser Gly Met Asn Tyr Leu His Leu
 260 265 270
 His Lys Ile Ile His Arg Asp Leu Lys Ser Pro Lys
 275 280

<210> 107
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 107

Met Cys Gly Gln Arg Trp Ile His Asn Phe Thr Cys Leu Ala Phe Leu
 1 5 10 15
 Phe His Thr Leu Lys Ser Gly Asn Lys Ser Val His Leu Arg Lys Ala
 20 25 30
 Ser Ser Pro Asn Leu His Arg Arg Gln Trp Glu Lys Asn Val Pro Asn
 35 40 45
 Thr Ala Leu Thr Ala Leu Glu Asn Ala Ser Ile Leu Thr Ser Ser Leu
 50 55 60
 Thr Ala Glu Asp Asp Arg Gly Gly Ser Val Ile Lys Tyr Ser Lys Asn
 65 70 75 80
 Thr Thr Arg Lys Gln Trp Leu Lys Glu Thr Pro Asp Thr Leu Leu Asn
 85 90 95
 Ile Leu Lys Asn Ala Asp Leu Ser Leu Ala Phe Gln Thr Tyr Thr Ile
 100 105 110
 Tyr Arg Pro Gly Ser Glu Gly Phe Leu Lys Gly Pro Leu Ser Glu Glu
 115 120 125
 Thr Glu Ala Ser Asp Ser Val Asp Gly Gly His Asp Ser Val Ile Leu
 130 135 140

Asp Pro Glu Arg Leu Glu Pro Gly Leu Asp Glu Glu Asp Thr Asp Phe
145 150 155 160

Glu Glu Glu Asp Asp Asn Pro Asp Trp Val Ser Glu Leu Lys Lys Arg
165 170 175

Ala Gly Trp Gln Gly Leu Cys Asp Arg
180 185

<210> 108
<211> 83
<212> PRT
<213> Homo sapiens

<400> 108

Met Ala Pro Pro Ser Glu Glu Thr Pro Leu Ile Pro Gln Arg Ser Cys
1 5 10 15

Ser Leu Leu Ser Thr Glu Ala Gly Ala Leu His Val Leu Leu Pro Ala
20 25 30

Arg Gly Pro Gly Pro Pro Gln Arg Leu Ser Phe Ser Phe Gly Val Pro
35 40 45

Val Arg Pro Val Gly Ala Asn Gly Pro Pro Leu Thr Ser Gly Phe Leu
50 55 60

Gly Gly Trp Ala Glu Ala Ser Val Gln Arg Gly Leu Trp Lys Cys Leu
65 70 75 80

Leu Thr Glu

<210> 109
<211> 213
<212> PRT
<213> Homo sapiens

<400> 109

Met Ala Glu Ser Ala Gly Ala Ser Ser Phe Phe Pro Leu Val Val Leu
1 5 10 15

Leu Leu Ala Gly Ser Gly Gly Ser Gly Pro Arg Gly Val Gln Ala Leu
20 25 30

Leu Cys Ala Cys Thr Ser Cys Leu Gln Ala Asn Tyr Thr Cys Glu Thr
35 40 45

Asp Gly Ala Cys Met Val Ser Ile Phe Asn Leu Asp Gly Met Glu His
50 55 60

His Val Arg Thr Cys Ile Pro Lys Val Glu Leu Val Pro Ala Gly Lys
65 70 75 80

Pro Phe Tyr Cys Leu Ser Ser Glu Asp Leu Arg Asn Thr His Cys Cys
85 90 95

Tyr Thr Asp Tyr Cys Asn Arg Ile Asp Leu Arg Val Pro Ser Gly His
100 105 110

Leu Lys Glu Pro Glu His Pro Ser Met Trp Gly Pro Val Glu Leu Val
115 120 125

Gly Ile Ile Ala Gly Pro Val Phe Leu Leu Phe Leu Ile Ile Ile Ile
130 135 140

Val Phe Leu Val Ile Asn Tyr His Gln Arg Val Tyr His Asn Arg Gln
145 150 155 160

Arg Leu Asp Met Glu Asp Pro Ser Cys Glu Met Cys Leu Ser Lys Asp
165 170 175

Lys Thr Leu Gln Asp Leu Val Tyr Asp Leu Ser Thr Ser Gly Ser Gly
180 185 190

Ser Gly Thr Lys Phe Phe Arg Ala Ser Cys Leu Trp Leu Ala Phe Ile
195 200 205

Ser Phe Pro Ala Gly
210

<210> 110

<211> 383

<212> PRT

<213> Homo sapiens

<400> 110

Met Asp Glu Gln Glu Ala Leu Asn Ser Ile Met Asn Asp Leu Val Ala
1 5 10 15

Leu Gln Met Asn Arg Arg His Arg Met Pro Gly Tyr Glu Thr Met Lys
20 25 30

Asn Lys Asp Thr Gly His Ser Asn Arg Gln Ser Asp Val Arg Ile Lys
35 40 45

Phe Glu His Asn Gly Glu Arg Arg Ile Ile Ala Phe Ser Arg Pro Val
50 55 60

Lys Tyr Glu Asp Val Glu His Lys Val Thr Thr Val Phe Gly Gln Pro
65 70 75 80

Leu Asp Leu His Tyr Met Asn Asn Glu Leu Ser Ile Leu Leu Lys Asn
85 90 95

Gln Asp Asp Leu Asp Lys Ala Ile Asp Ile Leu Asp Arg Ser Ser Ser
100 105 110

Met Lys Ser Leu Arg Ile Leu Leu Leu Ser Gln Asp Arg Asn His Asn
115 120 125

Ser Ser Ser Pro His Ser Glu Val Ser Arg Gln Val Arg Ile Lys Ala
130 135 140

Ser Gln Ser Ala Gly Asp Ile Asn Thr Ile Tyr Gln Pro Pro Glu Pro
145 150 155 160

Arg Ser Arg His Leu Ser Val Ser Ser Gln Asn Pro Gly Arg Ser Ser
165 170 175

Pro Pro Pro Gly Tyr Val Pro Glu Arg Gln Gln His Ile Ala Arg Gln
180 185 190

Gly Ser Tyr Thr Ser Ile Asn Ser Glu Gly Glu Phe Ile Pro Glu Thr
195 200 205

Ser Glu Gln Cys Met Leu Asp Pro Leu Ser Ser Ala Glu Asn Ser Leu
210 215 220

Ser Gly Ser Cys Gln Ser Leu Asp Arg Ser Ala Asp Ser Pro Ser Phe
225 230 235 240

Arg Lys Ser Arg Met Ser Arg Ala Gln Ser Phe Pro Asp Asn Arg Gln
245 250 255

Glu Tyr Ser Asp Arg Glu Thr Gln Leu Tyr Asp Lys Gly Val Lys Gly
260 265 270

Gly Thr Tyr Pro Arg Arg Tyr His Val Ser Val His His Lys Asp Tyr
275 280 285

Ser Asp Gly Arg Arg Thr Phe Pro Arg Ile Arg Arg His Gln Gly Asn
290 295 300

Leu Phe Thr Leu Val Pro Ser Ser Arg Ser Leu Ser Thr Asn Gly Glu
305 310 315 320

Asn Met Gly Leu Ala Val Gln Tyr Leu Asp Pro Arg Gly Arg Leu Arg
325 330 335

Ser Ala Asp Ser Glu Asn Ala Leu Ser Val Gln Glu Arg Asn Val Pro
340 345 350

Thr Lys Cys Glu Glu Leu Ser Leu Ala Arg Arg Arg Leu Pro Arg Trp
355 360 365

Ser Gln Thr Ser Tyr Gly Gly Lys Gln Leu Gly Pro Trp Asp Pro
370 375 380

<210> 111

<211> 414

<212> PRT

<213> Homo sapiens

<400> 111

Met Asp Glu Gln Glu Ala Leu Asn Ser Ile Met Asn Asp Leu Val Ala

1	5	10	15
Leu Gln Met Asn Arg Arg His Arg Met Pro Gly Tyr Glu Thr Met Lys	20	25	30
Asn Lys Asp Thr Gly His Ser Asn Arg Gln Lys Lys His Asn Ser Ser	35	40	45
Ser Ser Ala Leu Leu Asn Ser Pro Thr Val Thr Thr Ser Ser Cys Ala	50	55	60
Gly Ala Ser Glu Lys Lys Lys Phe Leu Ser Asp Val Arg Ile Lys Phe	65	70	75
Glu His Asn Gly Glu Arg Arg Ile Ile Ala Phe Ser Arg Pro Val Lys	85	90	95
Tyr Glu Asp Val Glu His Lys Val Thr Thr Val Phe Gly Gln Pro Leu	100	105	110
Asp Leu His Tyr Met Asn Asn Glu Leu Ser Ile Leu Leu Lys Asn Gln	115	120	125
Asp Asp Leu Asp Lys Ala Ile Asp Ile Leu Asp Arg Ser Ser Ser Met	130	135	140
Lys Ser Leu Arg Ile Leu Leu Leu Ser Gln Asp Arg Asn His Asn Ser	145	150	155
Ser Ser Pro His Ser Glu Val Ser Arg Gln Val Arg Ile Lys Ala Ser	165	170	175
Gln Ser Ala Gly Asp Ile Asn Thr Ile Tyr Gln Pro Pro Glu Pro Arg	180	185	190
Ser Arg His Leu Ser Val Ser Ser Gln Asn Pro Gly Arg Ser Ser Pro	195	200	205
Pro Pro Gly Tyr Val Pro Glu Arg Gln Gln His Ile Ala Arg Gln Gly	210	215	220
Ser Tyr Thr Ser Ile Asn Ser Glu Gly Glu Phe Ile Pro Glu Thr Ser	225	230	235
Glu Gln Cys Met Leu Asp Pro Leu Ser Ser Ala Glu Asn Ser Leu Ser	245	250	255
Gly Ser Cys Gln Ser Leu Asp Arg Ser Ala Asp Ser Pro Ser Phe Arg	260	265	270
Lys Ser Arg Met Ser Arg Ala Gln Ser Phe Pro Asp Asn Arg Gln Glu	275	280	285
Tyr Ser Asp Arg Glu Thr Gln Leu Tyr Asp Lys Gly Val Lys Gly Gly	290	295	300
Thr Tyr Pro Arg Arg Tyr His Val Ser Val His His Lys Asp Tyr Ser			

305		310		315		320
Asp Gly Arg Arg Thr Phe Pro Arg Ile Arg Arg His Gln Gly Asn Leu						
		325		330		335
Phe Thr Leu Val Pro Ser Ser Arg Ser Leu Ser Thr Asn Gly Glu Asn						
		340		345		350
Met Gly Leu Ala Val Gln Tyr Leu Asp Pro Arg Gly Arg Leu Arg Ser						
		355		360		365
Ala Asp Ser Glu Asn Ala Leu Ser Val Gln Glu Arg Asn Val Pro Thr						
		370		375		380
Lys Cys Glu Glu Leu Ser Leu Ala Arg Arg Arg Leu Pro Arg Trp Ser						
		385		390		395
				395		400
Gln Thr Ser Tyr Gly Gly Lys Gln Leu Gly Pro Trp Asp Pro						
		405		410		

<210> 112
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 112

Met Ala Lys Gln Tyr Asp Ser Val Glu Cys Pro Phe Cys Asp Glu Val															
1				5				10							15
Ser Lys Tyr Glu Lys Leu Ala Lys Ile Gly Gln Gly Thr Phe Gly Glu															
			20					25						30	
Val Phe Lys Ala Arg His Arg Lys Thr Gly Gln Lys Val Ala Leu Lys															
		35					40						45		
Lys Val Leu Met Glu Asn Glu Lys Glu Gly Phe Pro Ile Thr Ala Leu															
		50				55					60				
Arg Glu Ile Lys Ile Leu Gln Leu Leu Lys His Glu Asn Val Val Asn															
		65			70				75						80
Leu Ile Glu Ile Cys Arg Thr Lys Ala Ser Pro Tyr Asn Arg Cys Lys															
			85					90						95	
Gly Ser Ile Tyr Leu Val Phe Asp Phe Cys Glu His Asp Leu Ala Gly															
		100						105						110	
Leu Leu Ser Asn Val Leu Val Lys Phe Thr Leu Ser Glu Ile Lys Arg															
		115						120						125	
Val Met Gln Met Leu Leu Asn Gly Leu Tyr Tyr Asn His Asp Phe Phe															
		130				135						140			
Trp Ser Asp Pro Met Pro Ser Asp Leu Lys Gly Met Leu Ser Thr His															
		145			150				155						160

Leu Thr Ser Met Phe Glu Tyr Leu Ala Pro Pro Arg Arg Lys Gly Ser
165 170 175

Gln Ile Thr Gln Gln Ser Thr Asn Gln Ser Arg Asn Pro Ala Thr Thr
180 185 190

Asn Gln Thr Glu Phe Glu Arg Val Phe
195 200

<210> 113
<211> 125
<212> PRT
<213> Homo sapiens

<400> 113

Met Ala Thr Ser Arg Tyr Glu Pro Val Ala Glu Ile Gly Val Gly Ala
1 5 10 15

Tyr Gly Thr Val Tyr Lys Ala Arg Asp Pro His Ser Gly His Phe Cys
20 25 30

Ala Leu Lys Ser Val Arg Val Pro Asn Gly Gly Gly Gly Gly Gly Gly
35 40 45

Leu Pro Ile Ser Thr Val Arg Glu Val Ala Leu Leu Arg Arg Leu Glu
50 55 60

Ala Phe Glu His Pro Asn Val Val Arg Leu Met Asp Val Cys Ala Thr
65 70 75 80

Ser Arg Thr Asp Arg Glu Ile Lys Val Thr Leu Val Phe Glu His Val
85 90 95

Asp Gln Asp Leu Arg Thr Tyr Leu Asp Lys Ala Pro Pro Pro Gly Leu
100 105 110

Pro Ala Glu Thr Ile Lys Val Ser Gly Val Gly Arg His
115 120 125

<210> 114
<211> 45
<212> PRT
<213> Homo sapiens

<400> 114

Met Ala Thr Ser Arg Tyr Glu Pro Val Ala Glu Ile Gly Val Gly Ala
1 5 10 15

Tyr Gly Thr Val Tyr Lys Ala Arg Asp Pro His Ser Gly His Phe Cys
20 25 30

Ala Leu Lys Ser Val Arg Val Pro Thr His Leu Ser Phe
35 40 45

<210> 115

<211> 160
<212> PRT
<213> Homo sapiens

<400> 115

Met Gly Val Cys Pro Gly Lys Thr Pro Phe Cys Ser Pro Lys Pro Gln
1 5 10 15
Gly Leu Ala Arg Gly His Trp Ser Arg Arg Arg Asp Ile Cys Val Thr
20 25 30
Gly Pro Leu Pro Leu Glu Pro Arg Ala Val Tyr Cys Lys Asp Val Leu
35 40 45
Asp Ile Glu Gln Phe Ser Thr Val Lys Gly Val Asn Leu Asp His Thr
50 55 60
Asp Asp Asp Phe Tyr Ser Lys Phe Ser Thr Gly Ser Val Ser Ile Pro
65 70 75 80
Trp Gln Asn Glu Met Ile Glu Thr Glu Cys Phe Lys Glu Leu Asn Val
85 90 95
Phe Gly Pro Asn Gly Thr Leu Pro Pro Asp Leu Asn Arg Asn His Pro
100 105 110
Pro Glu Pro Pro Lys Lys Gly Leu Leu Gln Arg Leu Phe Lys Arg Gln
115 120 125
His Gln Asn Asn Ser Lys Ser Ser Pro Ser Ser Lys Thr Ser Phe Asn
130 135 140
His His Ile Asn Ser Asn His Val Ser Ser Asn Ser Thr Gly Ser Ser
145 150 155 160

<210> 116
<211> 300
<212> PRT
<213> Homo sapiens

<220>
<221> -
<222> (1)..(300)
<223> "XAA" can be any amino acid

<400> 116

Met Pro Arg Ala Arg Met Pro Xaa Pro Arg Ala His Ser Lys Ala Gly
1 5 10 15
Cys Pro Cys Gly Cys Pro Arg Asp Pro Leu Thr Leu Leu Ser Pro Ser
20 25 30
Gly His Ile Arg Ile Ser Asp Leu Gly Leu Ala Val Lys Ile Pro Glu
35 40 45

<223> "XAA" can be any amino acid

<400> 117

Met	Arg	Met	Pro	Arg	Ala	Arg	Met	Pro	Xaa	Pro	Arg	Ala	His	Ser	Lys
1				5					10					15	
Ala	Gly	Cys	Pro	Cys	Gly	Cys	Pro	Arg	Asp	Pro	Leu	Thr	Leu	Leu	Ser
			20					25					30		
Pro	Ser	Gly	His	Ile	Arg	Ile	Ser	Asp	Leu	Gly	Leu	Ala	Val	Lys	Ile
		35					40					45			
Pro	Glu	Gly	Asp	Leu	Ile	Arg	Gly	Arg	Val	Gly	Thr	Val	Gly	Tyr	Met
	50					55					60				
Ala	Pro	Glu	Val	Leu	Asn	Asn	Gln	Arg	Tyr	Gly	Leu	Ser	Pro	Asp	Tyr
65					70					75					80
Trp	Gly	Leu	Gly	Cys	Leu	Ile	Tyr	Glu	Met	Ile	Glu	Gly	Gln	Ser	Pro
				85					90					95	
Phe	Arg	Gly	Arg	Lys	Glu	Lys	Val	Lys	Arg	Glu	Glu	Val	Asp	Arg	Arg
			100					105					110		
Val	Leu	Glu	Thr	Glu	Glu	Val	Tyr	Ser	His	Lys	Phe	Ser	Glu	Glu	Ala
		115					120						125		
Lys	Ser	Ile	Cys	Lys	Met	Val	Ser	Ser	Trp	Trp	Pro	Asp	Ala	Thr	Leu
	130					135					140				
Lys	Leu	Val	Ala	Pro	Ser	Leu	Gly	Leu	Ala	Pro	Val	Cys	Pro	Gln	Asn
145					150				155						160
Ser	Lys	Gln	Ala	Glu	Gly	Thr	Gly	Val							
				165											

<210> 118

<211> 319

<212> PRT

<213> Homo sapiens

<400> 118

Met	Ala	Pro	Phe	Leu	Arg	Ile	Ala	Phe	Asn	Ser	Tyr	Glu	Leu	Gly	Ser
1				5					10					15	
Leu	Gln	Ala	Glu	Asp	Glu	Ala	Asn	Gln	Pro	Phe	Cys	Ala	Val	Lys	Met
			20					25					30		
Lys	Glu	Ala	Leu	Ser	Thr	Glu	Arg	Gly	Lys	Thr	Leu	Val	Gln	Lys	Lys
		35					40					45			
Pro	Thr	Met	Tyr	Pro	Glu	Trp	Lys	Ser	Thr	Phe	Asp	Ala	His	Ile	Tyr
	50					55					60				

Glu Gly Arg Val Ile Gln Ile Val Leu Met Arg Ala Ala Glu Glu Pro
 65 70 75 80
 Val Ser Glu Val Thr Val Gly Val Ser Val Leu Ala Glu Arg Cys Lys
 85 90 95
 Lys Asn Asn Gly Lys Ala Glu Phe Trp Leu Asp Leu Gln Pro Gln Ala
 100 105 110
 Lys Val Leu Met Ser Val Gln Tyr Phe Leu Glu Asp Val Asp Cys Lys
 115 120 125
 Gln Ser Met Arg Ser Glu Asp Glu Ala Lys Phe Pro Thr Met Asn Arg
 130 135 140
 Arg Gly Ala Ile Lys Gln Ala Lys Ile His Tyr Ile Lys Asn His Glu
 145 150 155 160
 Phe Ile Ala Thr Phe Phe Gly Gln Pro Thr Phe Cys Ser Val Cys Lys
 165 170 175
 Asp Phe Val Trp Gly Leu Asn Lys Gln Gly Tyr Lys Cys Arg Gln Cys
 180 185 190
 Asn Ala Ala Ile His Lys Lys Cys Ile Asp Lys Ile Ile Gly Arg Cys
 195 200 205
 Thr Gly Thr Ala Ala Asn Ser Arg Asp Thr Ile Phe Gln Lys Glu Arg
 210 215 220
 Phe Asn Ile Asp Met Pro His Arg Phe Lys Val His Asn Tyr Met Ser
 225 230 235 240
 Pro Thr Phe Cys Asp His Cys Gly Ser Leu Leu Leu Pro Ala Pro His
 245 250 255
 Asp Lys His Gln Trp Asp Cys Gly Asp Phe Cys Cys Trp Pro Arg Pro
 260 265 270
 Cys Pro Gln Ser Val Leu Gly Cys Arg Leu Ala Gly Leu Ser Trp Tyr
 275 280 285
 Phe Leu Cys Glu Leu Cys Val Asn Leu Leu Phe Leu Cys Leu Arg Arg
 290 295 300
 Glu Ile Val Asn Pro Val Phe His Tyr Leu Asn Val Val Ile Tyr
 305 310 315

<210> 119

<211> 236

<212> PRT

<213> Homo sapiens

<400> 119

Met Asp Glu Thr His Pro Gly Tyr Gly Lys Glu Val Asp Leu Glu Phe
 1 5 10 15

Leu Val Ser Pro Ser Leu Pro Cys Leu Leu Ser Phe Ala Gly Ser Ala
 20 25 30
 Arg His Leu Val Pro Pro Asp Ser Asn Leu Phe Ser Lys Leu Trp Ala
 35 40 45
 Cys Gly Val Ile Leu Phe Thr Leu Leu Ala Gly Ser Pro Pro Phe Trp
 50 55 60
 His Arg Arg Gln Ile Leu Met Leu Arg Met Ile Met Glu Gly Gln Tyr
 65 70 75 80
 Gln Phe Ser Ser Pro Glu Trp Asp Asp Arg Ser Ser Thr Val Lys Asp
 85 90 95
 Leu Ile Ser Arg Leu Leu Gln Val Asp Pro Glu Ala Arg Leu Thr Ala
 100 105 110
 Glu Gln Ala Leu Gln His Pro Phe Phe Glu Arg Cys Glu Gly Ser Gln
 115 120 125
 Pro Trp Asn Leu Thr Pro Arg Gln Arg Phe Arg Val Ala Val Trp Thr
 130 135 140
 Val Leu Ala Ala Gly Arg Val Ala Leu Ser Thr His Arg Val Arg Pro
 145 150 155 160
 Leu Thr Lys Asn Ala Leu Leu Arg Asp Pro Tyr Ala Leu Arg Ser Val
 165 170 175
 Arg His Leu Ile Asp Asn Cys Ala Phe Arg Leu Tyr Gly His Trp Val
 180 185 190
 Lys Lys Gly Glu Gln Gln Asn Arg Ala Ala Leu Phe Gln His Arg Pro
 195 200 205
 Pro Gly Pro Phe Pro Ile Met Gly Pro Glu Glu Glu Gly Asp Ser Ala
 210 215 220
 Ala Ile Thr Glu Asp Glu Ala Val Leu Val Leu Gly
 225 230 235

<210> 120

<211> 572

<212> PRT

<213> Homo sapiens

<400> 120

Met Ala Phe Cys Ala Lys Met Arg Ser Ser Lys Lys Thr Glu Val Asn
 1 5 10 15
 Leu Glu Ala Pro Glu Pro Gly Val Glu Val Ile Phe Tyr Leu Ser Asp
 20 25 30
 Arg Glu Pro Leu Arg Leu Gly Ser Gly Glu Tyr Thr Ala Glu Glu Leu

35					40					45					
Cys	Ile	Arg	Ala	Ala	Gln	Ala	Cys	Arg	Ile	Ser	Pro	Leu	Cys	His	Asn
50						55					60				
Leu	Phe	Ala	Leu	Tyr	Asp	Glu	Asn	Thr	Lys	Leu	Trp	Tyr	Ala	Pro	Asn
65					70					75					80
Arg	Thr	Ile	Thr	Val	Asp	Asp	Lys	Met	Ser	Leu	Arg	Leu	His	Tyr	Arg
				85					90					95	
Met	Arg	Phe	Tyr	Phe	Thr	Asn	Trp	His	Gly	Thr	Asn	Asp	Asn	Glu	Gln
			100					105					110		
Ser	Val	Trp	Arg	His	Ser	Pro	Lys	Lys	Gln	Lys	Asn	Gly	Tyr	Glu	Lys
		115					120					125			
Lys	Lys	Ile	Pro	Asp	Ala	Thr	Pro	Leu	Leu	Asp	Ala	Ser	Ser	Leu	Glu
	130					135					140				
Tyr	Leu	Phe	Ala	Gln	Gly	Gln	Tyr	Asp	Leu	Val	Lys	Cys	Leu	Ala	Pro
145					150					155					160
Ile	Arg	Asp	Pro	Lys	Thr	Glu	Gln	Asp	Gly	His	Asp	Ile	Glu	Asn	Glu
				165					170					175	
Cys	Leu	Gly	Met	Ala	Val	Leu	Ala	Ile	Ser	His	Tyr	Ala	Met	Met	Lys
			180					185					190		
Lys	Met	Gln	Leu	Pro	Glu	Leu	Pro	Lys	Asp	Ile	Ser	Tyr	Lys	Arg	Tyr
		195					200						205		
Ile	Pro	Glu	Thr	Leu	Asn	Lys	Ser	Ile	Arg	Gln	Arg	Asn	Leu	Leu	Thr
	210					215						220			
Arg	Met	Arg	Ile	Asn	Asn	Val	Phe	Lys	Asp	Phe	Leu	Lys	Glu	Phe	Asn
225					230					235					240
Asn	Lys	Thr	Ile	Cys	Asp	Ser	Ser	Val	Ser	Thr	His	Asp	Leu	Lys	Val
				245					250					255	
Lys	Tyr	Leu	Ala	Thr	Leu	Glu	Thr	Leu	Thr	Lys	His	Tyr	Gly	Ala	Glu
			260					265					270		
Ile	Phe	Glu	Thr	Ser	Met	Leu	Leu	Ile	Ser	Ser	Glu	Asn	Glu	Met	Asn
	275						280					285			
Trp	Phe	His	Ser	Asn	Asp	Gly	Gly	Asn	Val	Leu	Tyr	Tyr	Glu	Val	Met
	290					295					300				
Val	Thr	Gly	Asn	Leu	Gly	Ile	Gln	Trp	Arg	His	Lys	Pro	Asn	Val	Val
305					310					315					320
Ser	Val	Glu	Lys	Glu	Lys	Asn	Lys	Leu	Lys	Arg	Lys	Lys	Leu	Glu	Asn
				325					330					335	
Lys	Asp	Lys	Lys	Asp	Glu	Glu	Lys	Asn	Lys	Ile	Arg	Glu	Glu	Trp	Asn

340					345					350					
Asn	Phe	Ser	Phe	Phe	Pro	Glu	Ile	Thr	His	Ile	Val	Ile	Lys	Glu	Ser
		355					360					365			
Val	Val	Ser	Ile	Asn	Lys	Gln	Asp	Asn	Lys	Lys	Met	Glu	Leu	Lys	Leu
	370					375					380				
Ser	Ser	His	Glu	Glu	Ala	Leu	Ser	Phe	Val	Ser	Leu	Val	Asp	Gly	Tyr
385					390					395					400
Phe	Arg	Leu	Thr	Ala	Asp	Ala	His	His	Tyr	Leu	Cys	Thr	Asp	Val	Ala
				405					410					415	
Pro	Pro	Leu	Ile	Val	His	Asn	Ile	Gln	Asn	Gly	Cys	His	Gly	Pro	Ile
			420					425					430		
Cys	Thr	Glu	Tyr	Ala	Ile	Asn	Lys	Leu	Arg	Gln	Glu	Gly	Ser	Glu	Glu
		435					440					445			
Gly	Met	Tyr	Val	Leu	Arg	Trp	Ser	Cys	Thr	Asp	Phe	Asp	Asn	Ile	Leu
	450					455					460				
Met	Thr	Val	Thr	Cys	Phe	Glu	Lys	Ser	Glu	Gln	Val	Gln	Gly	Ala	Gln
465					470					475					480
Lys	Gln	Phe	Lys	Asn	Phe	Gln	Ile	Glu	Val	Gln	Lys	Gly	Arg	Tyr	Ser
				485					490					495	
Leu	His	Gly	Ser	Asp	Arg	Ser	Phe	Pro	Ser	Leu	Gly	Asp	Leu	Met	Ser
			500					505					510		
His	Leu	Lys	Lys	Gln	Ile	Leu	Arg	Thr	Asp	Asn	Ile	Ser	Phe	Met	Leu
		515					520					525			
Lys	Arg	Cys	Cys	Gln	Pro	Lys	Pro	Arg	Gly	Ser	Leu	Pro	Val	Pro	Glu
	530					535					540				
Pro	Gly	Cys	Ile	Pro	Ser	Val	Ile	Ala	Glu	Thr	Gln	Ile	Asp	Gln	Asn
545					550					555					560
Thr	Leu	Thr	Asp	Leu	Asn	Lys	Val	Asp	Pro	Pro	Pro				
				565					570						

<210> 121
 <211> 311
 <212> PRT
 <213> Homo sapiens

<400> 121

Met	Gly	Cys	Val	Gln	Cys	Lys	Asp	Lys	Glu	Ala	Thr	Lys	Leu	Thr	Glu
1				5					10					15	
Glu	Arg	Asp	Gly	Ser	Leu	Asn	Gln	Ser	Ser	Gly	Tyr	Arg	Tyr	Gly	Thr
			20					25					30		

<213> Homo sapiens

<400> 122

Met	Gly	Cys	Val	Gln	Cys	Lys	Asp	Lys	Glu	Ala	Thr	Lys	Leu	Thr	Glu	
1				5					10					15		
Glu	Arg	Asp	Gly	Ser	Leu	Asn	Gln	Ser	Ser	Gly	Tyr	Arg	Tyr	Gly	Thr	
			20					25					30			
Asp	Pro	Thr	Pro	Gln	His	Tyr	Pro	Ser	Phe	Gly	Val	Thr	Ser	Ile	Pro	
		35					40					45				
Asn	Tyr	Asn	Asn	Phe	His	Ala	Ala	Gly	Gly	Gln	Gly	Leu	Thr	Val	Phe	
	50					55					60					
Gly	Gly	Val	Asn	Ser	Ser	Ser	His	Thr	Gly	Thr	Leu	Arg	Thr	Arg	Gly	
65				70					75						80	
Gly	Thr	Gly	Val	Thr	Leu	Phe	Val	Ala	Leu	Tyr	Asp	Tyr	Glu	Ala	Arg	
				85					90					95		
Thr	Glu	Asp	Asp	Leu	Ser	Phe	His	Lys	Gly	Glu	Lys	Phe	Gln	Ile	Leu	
			100					105					110			
Asn	Ser	Ser	Glu	Gly	Asp	Trp	Trp	Glu	Ala	Arg	Ser	Leu	Thr	Thr	Gly	
		115					120					125				
Glu	Thr	Gly	Tyr	Ile	Pro	Ser	Asn	Tyr	Val	Ala	Pro	Val	Asp	Ser	Ile	
	130					135						140				
Gln	Ala	Glu	Glu	Trp	Tyr	Phe	Gly	Lys	Leu	Gly	Arg	Lys	Asp	Ala	Glu	
145					150					155					160	
Arg	Gln	Leu	Leu	Ser	Phe	Gly	Asn	Pro	Arg	Gly	Thr	Phe	Leu	Ile	Arg	
				165					170					175		
Glu	Ser	Glu	Thr	Thr	Lys	Gly	Ala	Tyr	Ser	Leu	Ser	Ile	Arg	Asp	Trp	
			180					185					190			
Asp	Asp	Met	Lys	Gly	Asp	His	Val	Lys	His	Tyr	Lys	Ile	Arg	Lys	Leu	
		195					200					205				
Asp	Asn	Gly	Gly	Tyr	Tyr	Ile	Thr	Thr	Arg	Ala	Gln	Phe	Glu	Thr	Leu	
	210					215					220					
Gln	Gln	Leu	Val	Gln	His	Tyr	Ser	Glu	Arg	Ala	Ala	Gly	Leu	Cys	Cys	
225					230					235					240	
Arg	Leu	Val	Val	Pro	Cys	His	Lys	Gly	Met	Pro	Arg	Leu	Thr	Asp	Leu	
				245					250					255		
Ser	Val	Lys	Thr	Lys	Asp	Val	Trp	Glu	Ile	Pro	Arg	Glu	Ser	Leu	Gln	
			260					265					270			
Leu	Ile	Lys	Arg	Leu	Gly	Asn	Gly	Gln	Phe	Gly	Glu	Val	Trp	Met	Gly	
		275					280					285				

Thr Trp Asn Gly Asn Thr Lys Val Ala Ile Lys Thr Leu Lys Pro Gly
290 295 300

Thr Met Ser Pro Glu Ser Phe Leu Glu Glu Ala Gln Ile Met Lys Lys
305 310 315 320

Leu Lys His Asp Lys Leu Val Gln Leu Tyr Ala Val Val Ser Glu Glu
325 330 335

Pro Ile Tyr Ile Val Thr Glu Tyr Met Asn Lys Gly Trp Ala Thr Pro
340 345 350

Leu Leu Ser Pro Ala His Ser Ala Leu Arg Gly Cys Leu Gly Glu Arg
355 360 365

Asn Gly Ser Phe Leu Leu Ala Thr Phe Leu Val Ser Ala Trp Val Lys
370 375 380

Tyr Ser His
385

<210> 123
<211> 516
<212> PRT
<213> Homo sapiens

<400> 123

Met Arg Leu Glu Leu Pro Ala Gly His Trp Glu Arg Pro Asp Leu Glu
1 5 10 15

Leu Leu Glu Lys Ser Thr Gln Gln Gly Arg Ala Trp Asp Leu Glu Leu
20 25 30

Leu Glu Lys Gly Ala Gly Ser Leu Pro Leu Tyr Val Trp Lys Val Ser
35 40 45

Leu Ser Leu Leu Glu Leu His Lys Arg Arg Lys Ala Leu Thr Glu Pro
50 55 60

Glu Ala Arg Tyr Tyr Leu Arg Gln Ile Val Leu Gly Cys Gln Tyr Leu
65 70 75 80

His Arg Asn Arg Val Ile His Arg Asp Leu Lys Leu Gly Asn Leu Phe
85 90 95

Leu Asn Glu Asp Leu Glu Val Lys Ile Gly Asp Phe Gly Leu Ala Thr
100 105 110

Lys Val Glu Tyr Asp Gly Glu Arg Lys Lys Thr Leu Cys Gly Thr Pro
115 120 125

Asn Tyr Ile Ala Pro Glu Val Leu Ser Lys Lys Gly His Ser Phe Glu
130 135 140

Val Asp Val Trp Ser Ile Gly Cys Ile Met Tyr Thr Leu Leu Val Gly

145		150		155		160
Lys Pro Pro Phe Glu Thr Ser Cys Leu Lys Glu Thr Tyr Leu Arg Ile						
	165			170		175
Lys Lys Asn Glu Tyr Ser Ile Pro Lys His Ile Asn Pro Val Ala Ala						
	180			185		190
Ser Leu Ile Gln Lys Met Leu Gln Thr Asp Pro Thr Ala Arg Pro Thr						
	195			200		205
Ile Asn Glu Leu Leu Asn Asp Glu Phe Phe Thr Ser Gly Tyr Ile Pro						
	210			215		220
Ala Arg Leu Pro Ile Thr Cys Leu Thr Ile Pro Pro Arg Phe Ser Ile						
	225			230		235
Ala Pro Ser Ser Leu Asp Pro Ser Asn Arg Lys Pro Leu Thr Val Leu						
	245			250		255
Asn Lys Gly Leu Glu Asn Pro Leu Pro Glu Arg Pro Arg Glu Lys Glu						
	260			265		270
Glu Pro Val Val Arg Glu Thr Gly Glu Val Val Asp Cys His Leu Ser						
	275			280		285
Asp Met Leu Gln Gln Leu His Ser Val Asn Ala Ser Lys Pro Ser Glu						
	290			295		300
Arg Gly Leu Val Arg Gln Glu Glu Ala Glu Asp Pro Ala Cys Ile Pro						
	305			310		315
Ile Phe Trp Val Ser Lys Trp Val Asp Tyr Ser Asp Lys Tyr Gly Leu						
	325			330		335
Gly Tyr Gln Leu Cys Asp Asn Ser Val Gly Val Leu Phe Asn Asp Ser						
	340			345		350
Thr Arg Leu Ile Leu Tyr Asn Asp Gly Asp Ser Leu Gln Tyr Ile Glu						
	355			360		365
Arg Asp Gly Thr Glu Ser Tyr Leu Thr Val Ser Ser His Pro Asn Ser						
	370			375		380
Leu Met Lys Lys Ile Thr Leu Leu Lys Tyr Phe Arg Asn Tyr Met Ser						
	385			390		395
Glu His Leu Leu Lys Ala Gly Ala Asn Ile Thr Pro Arg Glu Gly Asp						
	405			410		415
Glu Leu Ala Arg Leu Pro Tyr Leu Arg Thr Trp Phe Arg Thr Arg Ser						
	420			425		430
Ala Ile Ile Leu His Leu Ser Asn Gly Ser Val Gln Ile Asn Phe Phe						
	435			440		445
Gln Asp His Thr Lys Leu Ile Leu Cys Pro Leu Met Ala Ala Val Thr						

450	455	460
Tyr Ile Asp Glu Lys Arg Asp Phe Arg Thr Tyr Arg Leu Ser Leu Leu		
465	470	475 480
Glu Glu Tyr Gly Cys Cys Lys Glu Leu Ala Ser Arg Leu Arg Tyr Ala		
	485	490 495
Arg Thr Met Val Asp Lys Leu Leu Ser Ser Arg Ser Ala Ser Asn Arg		
	500	505 510
Leu Lys Ala Ser		
515		

<210> 124
 <211> 171
 <212> PRT
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(171)
 <223> "XAA" can be any amino acid

<400> 124

Met Ala Leu Leu Pro Pro Phe Leu Ala Ser His Arg Leu Glu Val Ser	
1 5 10 15	
Arg Asp Ser Gly Trp Leu Gly Gln Cys Trp Leu Gln Gly Val Trp Glu	
20 25 30	
Arg Xaa Pro His Ser Gly Leu Leu Tyr Pro Leu Gln His Pro Pro Ala	
35 40 45	
Glu Phe Ser Thr Tyr Leu Asn Phe Cys Arg Ser Leu Arg Phe Asp Asp	
50 55 60	
Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu Phe Arg Asn Leu Phe His	
65 70 75 80	
Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe Asp Trp Asn Met Leu Lys	
85 90 95	
Phe Gly Ala Ser Ser Ser Gln Ala Gln Pro Arg Asp Ser Pro Met Thr	
100 105 110	
Ala Lys Gly Pro Phe Cys Pro Arg Pro Cys Pro Cys Ala Gly Pro Thr	
115 120 125	
Tyr Ser Pro Thr Tyr Trp Cys Pro Ala Pro Leu Gly Thr Gln Ser Pro	
130 135 140	
Pro Asp Arg Pro Val Glu Glu Val Glu Glu Leu Ser Pro Gln Asn Tyr	
145 150 155 160	

Trp Pro Val Val Trp Thr Pro Gly Pro His Phe
165 170

<210> 125
<211> 134
<212> PRT
<213> Homo sapiens

<400> 125

Met Ala Leu Leu Pro Pro Phe Leu Ala Ser His Arg Leu Glu Val Ser
1 5 10 15

Arg Asp Ser Gly Trp Leu Gly Gln Cys Trp Leu Gln Gly Val Trp Glu
20 25 30

Arg Gly Leu Thr Val Ala Phe Ser Ile Leu Cys Asn Thr Leu Gln Pro
35 40 45

Glu Phe Ser Thr Tyr Leu Asn Phe Cys Arg Ser Leu Arg Phe Asp Asp
50 55 60

Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu Phe Arg Asn Leu Phe His
65 70 75 80

Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe Asp Trp Asn Met Leu Lys
85 90 95

Phe Gly Ala Ser Ser Ser Gln Ala Gln Pro Arg Asp Ser Pro Met Thr
100 105 110

Ala Lys Gly Pro Phe Cys Pro Arg Pro Cys Pro Cys Ala Gly Pro Thr
115 120 125

Tyr Ser Pro Thr Tyr Trp
130

<210> 126
<211> 233
<212> PRT
<213> Homo sapiens

<400> 126

Met Ala Leu Leu Pro Pro Phe Leu Ala Ser His Arg Leu Glu Val Ser
1 5 10 15

Arg Asp Ser Gly Trp Leu Gly Gln Cys Trp Leu Gln Gly Val Trp Glu
20 25 30

Arg Gly Leu Thr Val Ala Phe Ser Ile Leu Cys Asn Thr Leu Gln Pro
35 40 45

Glu Phe Ser Thr Tyr Leu Asn Phe Cys Arg Ser Leu Arg Phe Asp Asp
50 55 60

Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu Phe Arg Asn Leu Phe His

65		70		75		80									
Arg	Gln	Gly	Phe	Ser	Tyr	Asp	Tyr	Val	Phe	Asp	Trp	Asn	Met	Leu	Lys
				85					90					95	
Phe	Gly	Gly	Pro	Leu	Ser	Cys	Gln	Pro	Pro	Ala	Leu	Pro	Cys	Gly	Arg
			100					105					110		
Pro	Gln	Asp	Glu	Leu	Gly	Cys	Ser	Pro	Glu	Ser	Arg	Gly	Cys	Gly	Pro
		115					120					125			
Gly	Ala	Ala	Arg	Thr	Arg	Thr	Arg	Gly	Glu	Asp	Gly	Ala	Ala	Thr	Gly
	130					135					140				
Val	Arg	Asp	Pro	Ser	Pro	Ala	Pro	Trp	Pro	Thr	His	Gly	Gly	His	Cys
145					150					155					160
Gln	Pro	Ala	Pro	Gln	Cys	Arg	Arg	Ala	Arg	Gly	Phe	His	Ala	Ser	Leu
				165					170					175	
Pro	His	Pro	Ala	Gly	Trp	Gln	Tyr	Phe	Ser	Gln	Ser	Asp	Leu	Ala	Gly
			180					185					190		
Arg	Pro	Gly	Glu	Glu	Gly	Glu	Tyr	Glu	Ala	Ala	Gln	Gly	Cys	Ala	Arg
		195					200					205			
Gln	Arg	Leu	Leu	Leu	Arg	Pro	His	Trp	Ala	Ala	Arg	Gly	Leu	Pro	Asp
	210					215					220				
Pro	Ser	Leu	Thr	Asp	Lys	Cys	Ala	Ile							
225					230										

<210> 127
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 127

Met	Ala	Ala	Glu	Leu	Asn	Lys	Asn	Lys	Lys	Ala	Arg	Ala	Ala	Glu	Ala
1				5					10					15	
Ala	Arg	Ala	Ala	Glu	Ala	Ala	Lys	Ala	Ala	Glu	Ala	Thr	Lys	Ala	Ala
		20					25						30		
Glu	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Ala	Ser	Asn	Thr	Ser	Thr	Pro	Thr
		35					40					45			
Lys	Gly	Asn	Thr	Glu	Thr	Ser	Ala	Ser	Ala	Ser	Gln	Thr	Asn	His	Val
		50				55					60				
Lys	Asp	Val	Lys	Lys	Ile	Lys	Ile	Glu	His	Ala	Pro	Ser	Pro	Ser	Ser
65					70				75						80
Gly	Gly	Thr	Leu	Lys	Asn	Asp	Lys	Ala	Lys	Thr	Lys	Pro	Pro	Leu	Gln
				85					90					95	

Val Thr Lys Val Glu Asn Asn Leu Ile Val Asp Lys Ala Thr Lys Lys
 100 105 110
 Ala Val Ile Val Gly Lys Glu Ser Lys Ser Ala Ala Thr Lys Glu Glu
 115 120 125
 Ser Val Ser Leu Lys Glu Lys Thr Lys Pro Leu Thr Pro Ser Ile Gly
 130 135 140
 Ala Lys Glu Lys Glu Gln His Val Ala Leu Val Thr Ser Thr Leu Pro
 145 150 155 160
 Pro Leu Pro Leu Pro Pro Met Leu Pro Glu Asp Lys Glu Ala Asp Ser
 165 170 175
 Leu Arg Gly Asn Ile Ser Val Lys Ala Val Lys Lys Glu Val Glu Lys
 180 185 190
 Lys Leu Arg Cys Leu Leu Ala Asp Leu Pro Leu Pro Pro Glu Leu Pro
 195 200 205
 Gly Gly Asp Asp Leu Ser Lys Ser Pro Glu Glu Lys Lys Thr Ala Thr
 210 215 220
 Gln Leu His Ser Lys Arg Arg Pro Lys Tyr Val Leu Ala Phe Tyr Leu
 225 230 235 240
 Leu Leu Asn

<210> 128
 <211> 330
 <212> PRT
 <213> Homo sapiens

<400> 128

Met Ser Ala Lys Val Arg Leu Lys Lys Leu Glu Gln Leu Leu Leu Asp
 1 5 10 15
 Gly Pro Trp Arg Asn Glu Ser Ala Leu Ser Val Glu Thr Leu Leu Asp
 20 25 30
 Val Leu Val Cys Leu Tyr Thr Glu Cys Ser His Ser Ala Leu Arg Arg
 35 40 45
 Asp Lys Tyr Val Ala Glu Phe Leu Glu Trp Ala Lys Pro Phe Thr Gln
 50 55 60
 Leu Val Lys Glu Met Gln Leu His Arg Glu Asp Phe Glu Ile Ile Lys
 65 70 75 80
 Val Ile Gly Arg Gly Ala Phe Gly Glu Val Ala Val Val Lys Met Lys
 85 90 95
 Asn Thr Glu Arg Ile Tyr Ala Met Lys Ile Leu Asn Lys Trp Glu Met
 100 105 110

Leu Lys Arg Ala Glu Thr Ala Cys Phe Arg Glu Glu Arg Asp Val Leu
 115 120 125
 Val Asn Gly Asp Cys Gln Trp Ile Thr Ala Leu His Tyr Ala Phe Gln
 130 135 140
 Asp Glu Asn His Leu Tyr Leu Val Met Asp Tyr Tyr Val Gly Gly Asp
 145 150 155 160
 Leu Leu Thr Leu Leu Ser Lys Phe Glu Asp Lys Leu Pro Glu Asp Met
 165 170 175
 Ala Arg Phe Tyr Ile Gly Glu Met Val Leu Ala Ile Asp Ser Ile His
 180 185 190
 Gln Leu His Tyr Val His Arg Asp Ile Lys Pro Asp Asn Val Leu Leu
 195 200 205
 Asp Val Asn Gly His Ile Arg Leu Ala Asp Phe Gly Ser Cys Leu Lys
 210 215 220
 Met Asn Asp Asp Gly Thr Val Gln Ser Ser Val Ala Val Gly Thr Pro
 225 230 235 240
 Asp Tyr Ile Ser Pro Glu Ile Leu Gln Ala Met Glu Asp Gly Met Gly
 245 250 255
 Lys Tyr Gly Pro Glu Cys Asp Trp Trp Ser Leu Gly Val Cys Met Tyr
 260 265 270
 Glu Met Leu Tyr Gly Glu Thr Pro Phe Tyr Ala Glu Ser Leu Val Glu
 275 280 285
 Thr Tyr Gly Lys Ile Met Asn His Glu Glu Arg Phe Gln Phe Pro Ser
 290 295 300
 His Val Thr Asp Val Ser Glu Glu Ala Lys Asp Leu Ile Gln Arg Leu
 305 310 315 320
 Ser Cys Ile Gln Arg Thr Pro Tyr Leu Gln
 325 330

<210> 129
 <211> 246
 <212> PRT
 <213> Homo sapiens

<400> 129

Met Ser Ala Lys Val Arg Leu Lys Lys Leu Glu Gln Leu Leu Leu Asp
 1 5 10 15
 Gly Pro Trp Arg Asn Glu Ser Ala Leu Ser Val Glu Thr Leu Leu Asp
 20 25 30
 Val Leu Val Cys Leu Tyr Thr Glu Cys Ser His Ser Ala Leu Arg Arg

35					40					45					
Asp	Lys	Tyr	Val	Ala	Glu	Phe	Leu	Glu	Trp	Ala	Lys	Pro	Phe	Thr	Gln
50						55					60				
Leu	Val	Lys	Glu	Met	Gln	Leu	His	Arg	Glu	Asp	Phe	Glu	Ile	Ile	Lys
65					70					75					80
Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Glu	Val	Ala	Val	Val	Lys	Met	Lys
				85					90					95	
Asn	Thr	Glu	Arg	Ile	Tyr	Ala	Met	Lys	Ile	Leu	Asn	Lys	Trp	Glu	Met
			100					105					110		
Leu	Lys	Arg	Ala	Glu	Thr	Ala	Cys	Phe	Arg	Glu	Glu	Arg	Asp	Val	Leu
		115					120						125		
Val	Asn	Gly	Asp	Cys	Gln	Trp	Ile	Thr	Ala	Leu	His	Tyr	Ala	Phe	Gln
	130					135					140				
Asp	Glu	Asn	His	Leu	Tyr	Leu	Val	Met	Asp	Tyr	Tyr	Val	Gly	Gly	Asp
145				150					155						160
Leu	Leu	Thr	Leu	Leu	Ser	Lys	Phe	Glu	Asp	Lys	Leu	Pro	Glu	Asp	Met
			165						170					175	
Ala	Arg	Phe	Tyr	Ile	Gly	Glu	Met	Val	Leu	Ala	Ile	Asp	Ser	Ile	His
		180						185					190		
Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Val	Leu	Leu
	195						200					205			
Asp	Val	Asn	Gly	His	Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu	Lys
	210					215					220				
Met	Asn	Asp	Asp	Gly	Thr	Val	Gly	Ile	Phe	Val	Gly	Asp	Phe	Pro	Phe
225				230						235					240
Gly	Phe	Gly	Phe	Gly	Ile										
				245											

<210> 130
 <211> 378
 <212> PRT
 <213> Homo sapiens

<400> 130

Met	Glu	Leu	Arg	Val	Gly	Asn	Arg	Tyr	Arg	Leu	Gly	Arg	Lys	Ile	Gly
1				5					10					15	
Ser	Gly	Ser	Phe	Gly	Asp	Ile	Tyr	Leu	Val	Gly	Ile	Pro	Thr	Ile	Arg
			20					25					30		
Trp	Cys	Gly	Ala	Glu	Gly	Asp	Tyr	Asn	Val	Met	Val	Met	Glu	Leu	Leu
	35						40						45		

Gly	Pro	Ser	Leu	Glu	Asp	Leu	Phe	Asn	Phe	Cys	Ser	Arg	Lys	Phe	Ser	50	55	60	
Leu	Lys	Thr	Val	Leu	Leu	Leu	Ala	Asp	Gln	Met	Ile	Ser	Arg	Ile	Glu	65	70	75	80
Tyr	Ile	His	Ser	Lys	Asn	Phe	Ile	His	Arg	Asp	Val	Lys	Pro	Asp	Asn	85	90	95	
Phe	Leu	Met	Gly	Leu	Gly	Lys	Lys	Gly	Asn	Leu	Val	Tyr	Ile	Ile	Asp	100	105	110	
Phe	Gly	Leu	Ala	Lys	Lys	Tyr	Arg	Asp	Ala	Arg	Thr	His	Gln	His	Ile	115	120	125	
Pro	Tyr	Arg	Glu	Asn	Lys	Asn	Leu	Thr	Gly	Thr	Ala	Arg	Tyr	Ala	Ser	130	135	140	
Ile	Asn	Thr	His	Leu	Gly	Ile	Glu	Gln	Ser	Arg	Arg	Asp	Asp	Leu	Glu	145	150	155	160
Ser	Leu	Gly	Tyr	Val	Leu	Met	Tyr	Phe	Asn	Leu	Gly	Ser	Leu	Pro	Trp	165	170	175	
Gln	Gly	Leu	Lys	Ala	Ala	Thr	Lys	Arg	Gln	Lys	Tyr	Glu	Arg	Ile	Ser	180	185	190	
Glu	Lys	Lys	Met	Ser	Thr	Pro	Ile	Glu	Val	Leu	Cys	Lys	Gly	Tyr	Pro	195	200	205	
Ser	Glu	Phe	Ala	Thr	Tyr	Leu	Asn	Phe	Cys	Arg	Ser	Leu	Arg	Phe	Asp	210	215	220	
Asp	Lys	Pro	Asp	Tyr	Ser	Tyr	Leu	Arg	Gln	Leu	Phe	Arg	Asn	Leu	Phe	225	230	235	240
His	Arg	Gln	Gly	Phe	Ser	Tyr	Asp	Tyr	Val	Phe	Asp	Trp	Asn	Met	Leu	245	250	255	
Lys	Phe	Gly	Ala	Ser	Arg	Ala	Ala	Asp	Asp	Ala	Glu	Arg	Asp	Ala	Gly	260	265	270	
Asp	Arg	Glu	Glu	Arg	Leu	Arg	His	Ser	Arg	Asn	Pro	Ala	Thr	Arg	Gly	275	280	285	
Leu	Pro	Ser	Thr	Ala	Ser	Gly	Arg	Leu	Arg	Gly	Arg	Arg	Lys	Val	Ala	290	295	300	
Pro	Pro	Thr	Pro	Leu	Thr	Pro	Thr	Ser	His	Thr	Ala	Asn	Thr	Ser	Pro	305	310	315	320
Arg	Pro	Val	Ser	Gly	Met	Glu	Arg	Glu	Arg	Lys	Val	Ser	Met	Arg	Leu	325	330	335	
His	Arg	Gly	Ala	Pro	Val	Asn	Ile	Ser	Ser	Ser	Asp	Leu	Thr	Gly	Arg	340	345	350	

Gln Asp Thr Ser Arg Met Ser Thr Ser Gln Ile Pro Gly Arg Val Ala
 355 360 365

Ser Ser Gly Leu Gln Ser Val Val His Arg
 370 375

<210> 131
 <211> 561
 <212> PRT
 <213> Homo sapiens

<400> 131

Met Val Glu Trp Trp Ser Ala Leu Thr Cys Pro Leu Gln Thr Phe Ala
 1 5 10 15

Ala Pro Ser Phe Asp Asp Lys Ile Leu Glu Val Val Ala Val Phe Gly
 20 25 30

Ser Met Gln Met Ala Val Ser Arg Val Ile Arg Leu Gln His His Arg
 35 40 45

Ile Ala Gln Cys Arg Thr Val Lys Ile Ser Ile Leu Gly Asp Glu Gly
 50 55 60

Val Pro Val Gln Val Asp Gly Glu Ala Trp Val Gln Pro Pro Gly Tyr
 65 70 75 80

Ile Arg Ile Val His Lys Asn Arg Ala Gln Thr Leu Thr Arg Asp Arg
 85 90 95

Ala Phe Glu Ser Thr Leu Lys Ser Trp Glu Asp Lys Gln Lys Cys Glu
 100 105 110

Leu Pro Arg Pro Pro Ser Cys Ser Leu His Pro Glu Met Leu Ser Glu
 115 120 125

Glu Glu Ala Thr Gln Met Asp Gln Phe Gly Gln Ala Ala Gly Val Leu
 130 135 140

Ile His Ser Ile Arg Glu Ile Ala Gln Ser His Arg Asp Met Glu Gln
 145 150 155 160

Glu Leu Ala His Ala Val Asn Ala Ser Ser Lys Ser Met Asp Arg Val
 165 170 175

Tyr Gly Lys Pro Arg Thr Thr Glu Gly Leu Asn Cys Ser Phe Val Leu
 180 185 190

Glu Met Val Asn Asn Phe Arg Ala Leu Arg Ser Glu Thr Glu Leu Leu
 195 200 205

Leu Ser Gly Lys Met Ala Leu Gln Leu Asp Pro Pro Gln Lys Glu Gln
 210 215 220

Leu Gly Ser Ala Leu Ala Glu Met Asp Arg Gln Leu Arg Arg Leu Ala
 225 230 235 240

Asp	Thr	Pro	Trp	Leu	Cys	Gln	Ser	Ala	Glu	Pro	Gly	Asp	Glu	Glu	Ser	245	250	255	
Val	Met	Leu	Asp	Leu	Ala	Lys	Arg	Ser	Arg	Ser	Gly	Lys	Phe	Arg	Leu	260	265	270	
Val	Thr	Lys	Phe	Lys	Lys	Glu	Lys	Asn	Asn	Lys	Asn	Lys	Glu	Ala	His	275	280	285	
Ser	Ser	Leu	Gly	Ala	Pro	Val	His	Leu	Trp	Gly	Thr	Glu	Glu	Val	Ala	290	295	300	
Ala	Trp	Leu	Glu	His	Leu	Ser	Leu	Cys	Glu	Tyr	Lys	Asp	Ile	Phe	Thr	305	310	315	320
Arg	His	Asp	Ile	Arg	Gly	Ser	Glu	Leu	Leu	His	Leu	Glu	Arg	Arg	Asp	325	330	335	
Leu	Lys	Asp	Leu	Gly	Val	Thr	Lys	Val	Gly	His	Met	Lys	Arg	Ile	Leu	340	345	350	
Cys	Gly	Ile	Lys	Glu	Leu	Ser	Arg	Ser	Ala	Pro	Ala	Val	Glu	Ala	Gln	355	360	365	
Pro	Leu	Ser	Ser	Gln	Pro	Val	Ala	Ser	Thr	Ser	Pro	Pro	Pro	Arg	Pro	370	375	380	
Ser	Leu	Arg	Pro	Leu	Ser	Leu	Trp	Pro	Leu	Arg	Leu	Leu	Pro	Leu	Arg	385	390	395	400
Pro	Trp	Ala	Asp	Ala	Ala	Ala	Arg	Pro	Leu	Leu	Met	Val	Leu	Leu	Pro	405	410	415	
Leu	Ser	Ala	Thr	Glu	Ser	Leu	Arg	Asp	Thr	Val	His	Gln	Ser	Ser	Gly	420	425	430	
Val	Ser	Asn	Ile	Thr	Thr	Gln	Leu	Pro	Leu	Lys	Gln	His	Phe	Leu	Gln	435	440	445	
Leu	Arg	Val	Thr	Trp	Gly	Thr	Cys	Val	Thr	Ala	Thr	Gln	Leu	Ser	Pro	450	455	460	
Ala	Cys	Ala	Val	Gly	Gln	Gly	Ile	Gln	Arg	Arg	Leu	Ala	Ser	Trp	Ala	465	470	475	480
Leu	Leu	Ala	Trp	Pro	Arg	Ala	Trp	Ile	Val	Pro	Gly	Ala	Pro	Leu	Arg	485	490	495	
Val	Ser	Phe	Cys	Gly	Arg	Thr	Val	Trp	Leu	Arg	Leu	Leu	Ala	Pro	Ser	500	505	510	
Gln	Phe	Ser	Glu	Thr	Trp	Leu	Gly	Pro	Ser	Thr	Ala	Ala	Cys	Lys	Gly	515	520	525	
Pro	Cys	Leu	Leu	Met	Gln	Leu	Leu	Leu	Asn	Lys	Asn	Arg	Ala	Leu	Ser	530	535	540	

Trp Phe Glu Ser Ser Met Asp Val Ser Ser Leu Val Asp Cys Asn Leu
 545 550 555 560

Thr

<210> 132
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 132

Met Ser Asp Val Ala Ile Val Lys Glu Gly Trp Leu His Lys Arg Gly
 1 5 10 15

Glu Tyr Ile Lys Thr Trp Arg Pro Arg Tyr Phe Leu Leu Lys Asn Asp
 20 25 30

Gly Thr Phe Ile Gly Tyr Lys Glu Arg Pro Gln Asp Val Asp Gln Arg
 35 40 45

Glu Ala Pro Leu Asn Asn Phe Ser Val Ala Gln Cys Gln Leu Met Lys
 50 55 60

Thr Glu Arg Pro Arg Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp
 65 70 75 80

Thr Thr Val Ile Glu Arg Thr Phe His Val Glu Thr Pro Glu Glu Arg
 85 90 95

Glu Glu Trp Thr Thr Ala Ile Gln Thr Val Ala Asp Gly Leu Lys Lys
 100 105 110

Gln Glu Glu Glu Glu Met Asp Phe Arg Ser Gly Ser Pro Ser Asp Asn
 115 120 125

Ser Gly Ala Glu Glu Met Glu Val Ser Leu Ala Lys Pro Lys His Arg
 130 135 140

Val Ala Leu Gly Gly Arg Ala Gly Pro Ala His Val Ser Pro His Ser
 145 150 155 160

Val Ser Gln Pro Pro Trp Ala Val Cys His Gln Leu Ser Val Ile Ser
 165 170 175

Leu Gly Pro Trp Ala Ser Val Gln Pro Gly Gly Thr Arg Cys Asn Leu
 180 185 190

Thr Met Val Cys Trp Pro Ala Pro Ser Pro Gly Gly Gly Arg His Thr
 195 200 205

Ala Ala Pro Gln His
 210

<210> 133

<211> 425
<212> PRT
<213> Homo sapiens

<400> 133

Met	Ile	Val	His	Asp	Asp	Val	Glu	Ser	Glu	Pro	Ala	Met	Thr	Pro	Ser	
1			5						10					15		
Lys	Glu	Gly	Thr	Leu	Ile	Val	Arg	Gln	Thr	Gln	Ser	Ala	Ser	Ser	Thr	
			20					25					30			
Leu	Gln	Lys	His	Lys	Ser	Ser	Ser	Ser	Phe	Thr	Pro	Phe	Ile	Asp	Pro	
		35					40					45				
Arg	Leu	Leu	Gln	Ile	Ser	Pro	Ser	Ser	Gly	Thr	Thr	Val	Thr	Ser	Val	
	50					55					60					
Val	Gly	Phe	Ser	Cys	Asp	Gly	Met	Arg	Pro	Glu	Ala	Ile	Arg	Gln	Asp	
65				70						75					80	
Pro	Thr	Arg	Lys	Gly	Ser	Val	Val	Asn	Val	Asn	Pro	Thr	Asn	Thr	Arg	
			85					90						95		
Pro	Gln	Ser	Asp	Thr	Pro	Glu	Ile	Arg	Lys	Tyr	Lys	Lys	Arg	Phe	Asn	
			100					105					110			
Ser	Glu	Ile	Leu	Cys	Ala	Ala	Leu	Trp	Gly	Val	Asn	Leu	Leu	Val	Gly	
	115						120					125				
Thr	Glu	Ser	Gly	Leu	Met	Leu	Leu	Asp	Arg	Ser	Gly	Gln	Gly	Lys	Val	
	130					135					140					
Tyr	Pro	Leu	Ile	Asn	Arg	Arg	Arg	Phe	Gln	Gln	Met	Asp	Val	Leu	Glu	
145				150						155					160	
Gly	Leu	Asn	Val	Leu	Val	Thr	Ile	Ser	Gly	Lys	Lys	Asp	Lys	Leu	Arg	
			165						170					175		
Val	Tyr	Tyr	Leu	Ser	Trp	Leu	Arg	Asn	Lys	Ile	Leu	His	Asn	Asp	Pro	
			180					185					190			
Glu	Val	Glu	Lys	Lys	Gln	Gly	Trp	Thr	Thr	Val	Gly	Asp	Leu	Glu	Gly	
		195					200					205				
Cys	Val	His	Tyr	Lys	Val	Val	Lys	Tyr	Glu	Arg	Ile	Lys	Phe	Leu	Val	
	210					215					220					
Ile	Ala	Leu	Lys	Ser	Ser	Val	Glu	Val	Tyr	Ala	Trp	Ala	Pro	Lys	Pro	
225					230					235					240	
Tyr	His	Lys	Phe	Met	Ala	Phe	Lys	Ser	Phe	Gly	Glu	Leu	Val	His	Lys	
			245						250					255		
Pro	Leu	Leu	Val	Asp	Leu	Thr	Val	Glu	Glu	Gly	Gln	Arg	Leu	Lys	Val	
			260					265					270			

Ile Tyr Gly Ser Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly
275 280 285

Ser Val Tyr Asp Ile Tyr Leu Pro Thr His Ile Gln Cys Ser Ile Lys
290 295 300

Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly Met Glu Leu Leu
305 310 315 320

Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr Tyr Gly Arg Ile
325 330 335

Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro Thr Ser Val Ala
340 345 350

Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu Lys Ala Ile Glu
355 360 365

Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val Phe Met His Lys
370 375 380

Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn Asp Lys Val Phe
385 390 395 400

Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val Tyr Phe Met Thr
405 410 415

Leu Gly Arg Thr Ser Leu Leu Ser Trp
420 425

<210> 134

<211> 515

<212> PRT

<213> Homo sapiens

<400> 134

Met Ala Ser Arg Thr Pro Arg Asn Cys Ala Val Leu Lys Gly Glu Val
1 5 10 15

Asp Leu Thr Ala Leu Ala Lys Glu Leu Arg Ala Val Glu Asp Val Arg
20 25 30

Pro Pro His Lys Val Thr Asp Tyr Ser Ser Ser Ser Glu Glu Ser Gly
35 40 45

Thr Thr Asp Glu Glu Asp Asp Asp Val Glu Gln Glu Gly Ala Asp Glu
50 55 60

Ser Thr Ser Gly Pro Glu Asp Thr Arg Ala Ala Ser Ser Leu Asn Leu
65 70 75 80

Ser Asn Gly Glu Thr Glu Ser Val Lys Thr Met Ile Val His Asp Asp
85 90 95

Val Glu Ser Glu Pro Ala Met Thr Pro Ser Lys Glu Gly Thr Leu Ile
100 105 110

Val	Arg	Gln	Thr	Gln	Ser	Ala	Ser	Ser	Thr	Leu	Gln	Lys	His	Lys	Ser	115	120	125	
Ser	Ser	Ser	Phe	Thr	Pro	Phe	Ile	Asp	Pro	Arg	Leu	Leu	Gln	Ile	Ser	130	135	140	
Pro	Ser	Ser	Gly	Thr	Thr	Val	Thr	Ser	Val	Val	Gly	Phe	Ser	Cys	Asp	145	150	155	160
Gly	Met	Arg	Pro	Glu	Ala	Ile	Arg	Gln	Asp	Pro	Thr	Arg	Lys	Gly	Ser	165	170	175	
Val	Val	Asn	Val	Asn	Pro	Thr	Asn	Thr	Arg	Pro	Gln	Ser	Asp	Thr	Pro	180	185	190	
Glu	Ile	Arg	Lys	Tyr	Lys	Lys	Arg	Phe	Asn	Ser	Glu	Ile	Leu	Cys	Ala	195	200	205	
Ala	Leu	Trp	Gly	Val	Asn	Leu	Leu	Val	Gly	Thr	Glu	Ser	Gly	Leu	Met	210	215	220	
Leu	Leu	Asp	Arg	Ser	Gly	Gln	Gly	Lys	Val	Tyr	Pro	Leu	Ile	Asn	Arg	225	230	235	240
Arg	Arg	Phe	Gln	Gln	Met	Asp	Val	Leu	Glu	Gly	Leu	Asn	Val	Leu	Val	245	250	255	
Thr	Ile	Ser	Gly	Lys	Lys	Asp	Lys	Leu	Arg	Val	Tyr	Tyr	Leu	Ser	Trp	260	265	270	
Leu	Arg	Asn	Lys	Ile	Leu	His	Asn	Asp	Pro	Glu	Val	Glu	Lys	Lys	Gln	275	280	285	
Gly	Trp	Thr	Thr	Val	Gly	Asp	Leu	Glu	Gly	Cys	Val	His	Tyr	Lys	Val	290	295	300	
Val	Lys	Tyr	Glu	Arg	Ile	Lys	Phe	Leu	Val	Ile	Ala	Leu	Lys	Ser	Ser	305	310	315	320
Val	Glu	Val	Tyr	Ala	Trp	Ala	Pro	Lys	Pro	Tyr	His	Lys	Phe	Met	Ala	325	330	335	
Phe	Lys	Ser	Phe	Gly	Glu	Leu	Val	His	Lys	Pro	Leu	Leu	Val	Asp	Leu	340	345	350	
Thr	Val	Glu	Glu	Gly	Gln	Arg	Leu	Lys	Val	Ile	Tyr	Gly	Ser	Cys	Ala	355	360	365	
Gly	Phe	His	Ala	Val	Asp	Val	Asp	Ser	Gly	Ser	Val	Tyr	Asp	Ile	Tyr	370	375	380	
Leu	Pro	Thr	His	Ile	Gln	Cys	Ser	Ile	Lys	Pro	His	Ala	Ile	Ile	Ile	385	390	395	400
Leu	Pro	Asn	Thr	Asp	Gly	Met	Glu	Leu	Leu	Val	Cys	Tyr	Glu	Asp	Glu	405	410	415	

Gly Val Tyr Val Asn Thr Tyr Gly Arg Ile Thr Lys Asp Val Val Leu
420 425 430

Gln Trp Gly Glu Met Pro Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln
435 440 445

Thr Met Gly Trp Gly Glu Lys Ala Ile Glu Ile Arg Ser Val Glu Thr
450 455 460

Gly His Leu Asp Gly Val Phe Met His Lys Arg Ala Gln Arg Leu Lys
465 470 475 480

Phe Leu Cys Glu Arg Asn Asp Lys Val Phe Phe Ala Ser Val Arg Ser
485 490 495

Gly Gly Ser Ser Gln Val Tyr Phe Met Thr Leu Gly Arg Thr Ser Leu
500 505 510

Leu Ser Trp
515

<210> 135
<211> 468
<212> PRT
<213> Homo sapiens

<400> 135

Met Ser Ala Arg Val Gln Leu Thr Lys Ser Val Pro Ala Ile Met Arg
1 5 10 15

Ala Met Ala Leu Arg Phe Ala Phe Thr Ser Cys Gln Ile Ser Tyr Ser
20 25 30

Lys Ala Ile Pro Pro Pro Leu Pro Pro Pro Pro Pro His Pro Pro
35 40 45

Ala Ser Arg His Pro Pro Cys Pro His Arg His Pro Arg Asp Lys Leu
50 55 60

Thr Ala Asn Glu Thr Gln Ser Ala Ser Ser Thr Leu Gln Lys His Lys
65 70 75 80

Ser Ser Ser Ser Phe Thr Pro Phe Ile Asp Pro Arg Leu Leu Gln Ile
85 90 95

Ser Pro Ser Ser Gly Thr Thr Val Thr Ser Val Val Gly Phe Ser Cys
100 105 110

Asp Gly Met Arg Pro Glu Ala Ile Arg Gln Asp Pro Thr Arg Lys Gly
115 120 125

Ser Val Val Asn Val Asn Pro Thr Asn Thr Arg Pro Gln Ser Asp Thr
130 135 140

Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu Cys

145		150		155		160
Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly Leu	165		170		175	
Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile Asn	180		185		190	
Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val Leu	195		200		205	
Val Thr Ile Ser Gly Lys Lys Asp Lys Leu Arg Val Tyr Tyr Leu Ser	210		215		220	
Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys Lys	225	230		235		240
Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr Lys		245		250		255
Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys Ser		260		265		270
Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe Met		275		280		285
Ala Phe Lys Ser Phe Gly Glu Leu Val His Lys Pro Leu Leu Val Asp		290		295		300
Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val Ile Tyr Gly Ser Cys		305	310		315	320
Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp Ile		325		330		335
Tyr Leu Pro Thr His Ile Gln Cys Ser Ile Lys Pro His Ala Ile Ile		340		345		350
Ile Leu Pro Asn Thr Asp Gly Met Glu Leu Leu Val Cys Tyr Glu Asp		355		360		365
Glu Gly Val Tyr Val Asn Thr Tyr Gly Arg Ile Thr Lys Asp Val Val		370		375		380
Leu Gln Trp Gly Glu Met Pro Thr Ser Val Ala Tyr Ile Arg Ser Asn		385		390		395
Gln Thr Met Gly Trp Gly Glu Lys Ala Ile Glu Ile Arg Ser Val Glu		405		410		415
Thr Gly His Leu Asp Gly Val Phe Met His Lys Arg Ala Gln Arg Leu		420		425		430
Lys Phe Leu Cys Glu Arg Asn Asp Lys Val Phe Phe Ala Ser Val Arg		435		440		445
Ser Gly Gly Ser Ser Gln Val Tyr Phe Met Thr Leu Gly Arg Thr Ser						

450

455

460

Leu Leu Ser Trp

465

<210> 136

<211> 666

<212> PRT

<213> Homo sapiens

<220>

<221> -

<222> (1)..(666)

<223> "XAA" can be any amino acid

<400> 136

Met	Asp	Cys	Gln	Leu	Ser	Ile	Leu	Leu	Leu	Leu	Ser	Cys	Ser	Val	Leu
1				5					10					15	

Asp	Ser	Phe	Gly	Glu	Leu	Ile	Pro	Gln	Pro	Ser	Asn	Glu	Val	Asn	Leu
			20					25					30		

Leu	Asp	Ser	Lys	Thr	Ile	Gln	Gly	Glu	Leu	Gly	Trp	Ile	Ser	Tyr	Pro
		35					40					45			

Ser	His	Gly	Trp	Glu	Glu	Ile	Ser	Gly	Val	Asp	Glu	His	Tyr	Thr	Pro
	50					55					60				

Ile	Arg	Thr	Tyr	Gln	Val	Cys	Asn	Val	Met	Asp	His	Ser	Gln	Asn	Asn
65					70					75					80

Trp	Leu	Arg	Thr	Asn	Trp	Val	Pro	Arg	Asn	Ser	Ala	Gln	Lys	Ile	Tyr
				85					90					95	

Val	Glu	Leu	Lys	Phe	Thr	Leu	Arg	Asp	Cys	Asn	Ser	Ile	Pro	Leu	Val
			100					105					110		

Leu	Gly	Thr	Cys	Lys	Glu	Thr	Phe	Asn	Leu	Tyr	Tyr	Met	Glu	Ser	Asp
		115					120					125			

Asp	Asp	His	Gly	Val	Lys	Phe	Arg	Glu	His	Gln	Phe	Thr	Lys	Ile	Asp
	130					135					140				

Thr	Ile	Ala	Ala	Asp	Glu	Ser	Phe	Thr	Gln	Met	Asp	Leu	Gly	Asp	Arg
145					150					155					160

Ile	Leu	Lys	Leu	Asn	Thr	Glu	Ile	Arg	Glu	Val	Gly	Pro	Val	Asn	Lys
				165					170					175	

Lys	Gly	Phe	Tyr	Leu	Ala	Phe	Gln	Asp	Val	Gly	Ala	Cys	Val	Ala	Leu
			180					185					190		

Val	Ser	Val	Arg	Val	Tyr	Phe	Lys	Lys	Cys	Pro	Phe	Thr	Val	Lys	Asn
		195					200					205			

Leu	Ala	Met	Phe	Pro	Asp	Thr	Val	Pro	Met	Asp	Ser	Gln	Ser	Leu	Val	210	215	220	
Glu	Val	Arg	Gly	Ser	Cys	Val	Asn	Asn	Ser	Lys	Glu	Glu	Asp	Pro	Pro	225	230	235	240
Arg	Met	Tyr	Cys	Ser	Thr	Glu	Gly	Glu	Trp	Leu	Val	Pro	Ile	Gly	Lys	245	250	255	
Cys	Ser	Cys	Asn	Ala	Gly	Tyr	Glu	Glu	Arg	Gly	Phe	Met	Cys	Gln	Ala	260	265	270	
Cys	Arg	Pro	Gly	Phe	Tyr	Lys	Ala	Leu	Asp	Gly	Asn	Met	Lys	Cys	Ala	275	280	285	
Lys	Cys	Pro	Pro	His	Ser	Ser	Thr	Gln	Glu	Asp	Gly	Ser	Met	Asn	Cys	290	295	300	
Arg	Cys	Glu	Asn	Asn	Tyr	Phe	Arg	Ala	Asp	Lys	Asp	Pro	Pro	Ser	Met	305	310	315	320
Ala	Cys	Thr	Arg	Pro	Pro	Ser	Ser	Pro	Arg	Asn	Val	Ile	Ser	Asn	Ile	325	330	335	
Asn	Glu	Thr	Ser	Val	Ile	Leu	Asp	Trp	Ser	Trp	Pro	Leu	Asp	Thr	Gly	340	345	350	
Gly	Arg	Lys	Asp	Val	Thr	Phe	Asn	Ile	Ile	Cys	Lys	Lys	Cys	Gly	Trp	355	360	365	
Asn	Ile	Lys	Gln	Cys	Glu	Pro	Cys	Ser	Pro	Asn	Val	Arg	Phe	Leu	Pro	370	375	380	
Arg	Gln	Phe	Gly	Leu	Thr	Asn	Thr	Thr	Val	Thr	Val	Thr	Asp	Leu	Leu	385	390	395	400
Ala	His	Thr	Asn	Tyr	Thr	Phe	Glu	Ile	Asp	Ala	Val	Asn	Gly	Val	Ser	405	410	415	
Glu	Leu	Ser	Ser	Pro	Pro	Arg	Gln	Phe	Ala	Ala	Val	Ser	Ile	Thr	Thr	420	425	430	
Asn	Gln	Ala	Ala	Pro	Ser	Pro	Val	Leu	Thr	Ile	Lys	Lys	Asp	Arg	Thr	435	440	445	
Ser	Arg	Asn	Ser	Ile	Ser	Leu	Ser	Trp	Gln	Glu	Pro	Glu	His	Pro	Asn	450	455	460	
Gly	Ile	Ile	Leu	Asp	Tyr	Glu	Val	Lys	Tyr	Tyr	Glu	Lys	Gln	Glu	Gln	465	470	475	480
Glu	Thr	Ser	Tyr	Thr	Ile	Leu	Arg	Ala	Arg	Gly	Thr	Asn	Val	Thr	Ile	485	490	495	
Ser	Ser	Leu	Lys	Pro	Asp	Thr	Ile	Tyr	Val	Phe	Gln	Ile	Arg	Ala	Arg	500	505	510	

Thr Ala Ala Gly Tyr Gly Thr Asn Ser Arg Lys Phe Glu Phe Glu Thr
515 520 525

Ser Pro Asp Ser Phe Ser Ile Ser Gly Glu Ser Ser Gln Val Val Met
530 535 540

Ile Ala Ile Ser Ala Ala Val Ala Ile Ile Leu Leu Thr Val Val Ile
545 550 555 560

Tyr Val Leu Ile Gly Arg Phe Cys Gly Tyr Lys Ser Lys His Gly Ala
565 570 575

Asp Glu Lys Arg Leu His Phe Gly Asn Gly His Leu Lys Leu Pro Gly
580 585 590

Leu Arg Thr Tyr Val Asp Pro His Thr Tyr Glu Asp Pro Thr Gln Ala
595 600 605

Val His Glu Phe Ala Lys Glu Leu Asp Ala Thr Asn Ile Ser Ile Asp
610 615 620

Lys Val Val Gly Ala Val Leu Thr Ser Glu Gln Leu His Asp Ala Glu
625 630 635 640

Xaa Phe Ser Leu Ala Gly Phe Asn Val Ser Ser Gln Gly Val His Phe
645 650 655

Ser Pro Ala Arg Ser Leu Pro Val Ala Asn
660 665

<210> 137
<211> 458
<212> PRT
<213> Homo sapiens

<400> 137

Met Lys Tyr Thr Phe Trp Gly Trp Val Ala Val Val Lys Leu Lys Asn
1 5 10 15

Ala Asp Lys Val Phe Ala Met Lys Ile Leu Asn Lys Trp Glu Met Leu
20 25 30

Lys Arg Ala Glu Thr Ala Cys Phe Arg Glu Glu Arg Asp Val Leu Val
35 40 45

Asn Gly Asp Asn Lys Trp Ile Thr Thr Leu His Tyr Ala Phe Gln Asp
50 55 60

Asp Asn Asn Leu Tyr Leu Val Met Asp Tyr Tyr Val Gly Gly Asp Leu
65 70 75 80

Leu Thr Leu Leu Ser Lys Phe Glu Asp Arg Leu Pro Glu Asp Met Ala
85 90 95

Arg Phe Tyr Leu Ala Glu Met Val Ile Ala Ile Asp Ser Val His Gln
100 105 110

Leu His Tyr Val His Arg Asp Ile Lys Pro Asp Asn Ile Leu Met Asp
 115 120 125
 Met Asn Gly His Ile Arg Leu Ala Asp Phe Gly Ser Cys Leu Lys Leu
 130 135 140
 Met Glu Asp Gly Thr Val Gln Ser Ser Val Ala Val Gly Thr Pro Asp
 145 150 155 160
 Tyr Ile Ser Pro Glu Ile Leu Gln Ala Met Glu Asp Gly Lys Gly Arg
 165 170 175
 Tyr Gly Pro Glu Cys Asp Trp Trp Ser Leu Gly Val Cys Met Tyr Glu
 180 185 190
 Met Leu Tyr Gly Glu Thr Pro Phe Tyr Ala Glu Ser Leu Val Glu Thr
 195 200 205
 Tyr Gly Lys Ile Met Asn His Lys Glu Arg Phe Gln Phe Pro Ala Gln
 210 215 220
 Val Thr Asp Val Ser Glu Asn Ala Lys Asp Leu Ile Arg Arg Leu Ile
 225 230 235 240
 Cys Ser Arg Glu His Arg Leu Gly Gln Asn Gly Ile Glu Asp Phe Lys
 245 250 255
 Lys His Pro Phe Phe Ser Gly Ile Asp Trp Asp Asn Ile Arg Asn Cys
 260 265 270
 Glu Ala Pro Tyr Ile Pro Glu Val Ser Ser Pro Thr Asp Thr Ser Asn
 275 280 285
 Phe Asp Val Asp Asp Asp Cys Leu Lys Asn Ser Glu Thr Met Pro Pro
 290 295 300
 Pro Thr His Thr Ala Phe Ser Gly His His Leu Pro Phe Val Gly Phe
 305 310 315 320
 Thr Tyr Thr Ser Ser Cys Val Leu Ser Asp Arg Ser Cys Leu Arg Val
 325 330 335
 Thr Ala Gly Pro Thr Ser Leu Asp Leu Asp Val Asn Val Gln Arg Thr
 340 345 350
 Leu Asp Asn Asn Leu Ala Thr Glu Ala Tyr Glu Arg Arg Ile Lys Arg
 355 360 365
 Leu Glu Gln Glu Lys Leu Glu Leu Ser Arg Lys Leu Gln Glu Ser Thr
 370 375 380
 Gln Thr Val Gln Ala Leu Gln Tyr Ser Thr Val Asp Gly Pro Leu Thr
 385 390 395 400
 Ala Ser Lys Asp Leu Glu Ile Lys Asn Leu Lys Glu Glu Ile Glu Lys
 405 410 415

Leu Arg Lys Gln Val Thr Glu Ser Ser His Leu Glu Gln Gln Leu Glu
420 425 430

Glu Ala Asn Ala Val Arg Gln Glu Leu Asp Asp Ala Phe Arg Gln Ile
435 440 445

Lys Ala Tyr Glu Lys Gln Ile Lys Thr Leu
450 455

<210> 138
<211> 262
<212> PRT
<213> Homo sapiens

<400> 138

Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu
1 5 10 15

Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr
20 25 30

Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys
35 40 45

Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys
50 55 60

Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu
65 70 75 80

Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys
85 90 95

Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln
100 105 110

Leu Val Asp Val Leu Tyr Asn Glu Glu Lys Gln Lys Met Tyr Met Val
115 120 125

Met Glu Tyr Cys Val Cys Gly Met Gln Glu Met Leu Asp Ser Val Pro
130 135 140

Glu Lys Arg Phe Pro Val Cys Gln Ala His Gly Ser Pro Ser Arg Arg
145 150 155 160

Gly Gly Arg His Ala Ser Val Pro Thr Thr Pro Gln Asp Leu Arg Ser
165 170 175

Ala Leu Gln Gly Arg Ala Gly Gly Gln Gln Gly Pro Gly Ala Ala Leu
180 185 190

Pro Pro Arg Pro Pro Gly Ser Ala Arg Gly Leu Leu Thr Ser Gln Pro
195 200 205

Arg Ala Glu Pro Ser Arg Ala Gly Val Gly Gly Gly Arg Arg Pro Pro

210	215	220
Cys Thr Leu Cys Gly Asp Tyr Trp Pro Arg Pro Trp Pro Arg Ala Pro		
225	230	235 240
Gln Gly Ala Gln Arg Arg Pro Ala Ala Pro Pro Gln Thr Ser Trp Arg		
	245 250	255
Val Trp Arg Pro Gly Ser		
	260	
<210> 139		
<211> 203		
<212> PRT		
<213> Homo sapiens		
<400> 139		
Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu		
1	5	10 15
Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr		
	20	25 30
Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys		
	35	40 45
Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys		
	50	55 60
Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu		
65	70	75 80
Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys		
	85	90 95
Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln		
	100	105 110
Leu Val Asp Val Leu Tyr Asn Glu Glu Lys Gln Lys Met Tyr Met Val		
	115	120 125
Met Glu Tyr Cys Val Cys Gly Met Gln Glu Met Leu Asp Ser Val Pro		
	130	135 140
Glu Lys Arg Phe Pro Val Cys Gln Ala His Gly Tyr Phe Cys Gln Leu		
145	150	155 160
Ile Asp Gly Leu Glu Tyr Leu His Ser Gln Gly Ile Val His Lys Asp		
	165	170 175
Ile Lys Pro Gly Asn Leu Leu Leu Thr Thr Gly Gly Thr Leu Lys Ile		
	180	185 190
Ser Asp Leu Gly Val Ala Glu Val Gly Thr Cys		
	195	200

<210> 140
 <211> 244
 <212> PRT
 <213> Homo sapiens

<400> 140

Met	Asp	Arg	Glu	Thr	Thr	Pro	Leu	Gly	Leu	Leu	Trp	Leu	Ile	Gln	Val
1				5					10					15	
Ile	Pro	Ser	Lys	Leu	Leu	Pro	Ser	Leu	Gln	Val	Lys	Asp	Phe	Leu	Ser
			20					25					30		
Gln	Leu	Arg	Ser	Ser	Asn	Arg	Arg	Phe	Ser	Ile	Pro	Glu	Ser	Gly	Gln
			35				40					45			
Gly	Gly	Thr	Glu	Met	Asp	Gly	Phe	Arg	Arg	Thr	Ile	Glu	Asn	Gln	His
	50					55					60				
Ser	Arg	Asn	Asp	Val	Met	Val	Ser	Glu	Trp	Leu	Asn	Lys	Leu	Asn	Leu
65					70				75						80
Glu	Glu	Pro	Pro	Ser	Ser	Val	Pro	Lys	Lys	Cys	Pro	Ser	Leu	Thr	Lys
				85					90					95	
Arg	Ser	Arg	Ala	Gln	Glu	Glu	Gln	Val	Pro	Gln	Ala	Trp	Thr	Ala	Gly
			100					105					110		
Thr	Ser	Ser	Asp	Ser	Met	Ala	Gln	Pro	Pro	Gln	Thr	Pro	Glu	Thr	Ser
			115				120					125			
Thr	Phe	Arg	Asn	Gln	Met	Pro	Ser	Pro	Thr	Ser	Thr	Gly	Thr	Pro	Ser
	130					135						140			
Pro	Gly	Pro	Arg	Gly	Asn	Gln	Gly	Ala	Glu	Arg	Gln	Gly	Met	Asn	Trp
145					150					155					160
Ser	Cys	Arg	Thr	Pro	Glu	Pro	Asn	Pro	Val	Thr	Gly	Arg	Pro	Leu	Val
				165					170					175	
Asn	Ile	Tyr	Asn	Cys	Ser	Gly	Val	Gln	Val	Gly	Asp	Asn	Asn	Tyr	Leu
			180					185					190		
Thr	Met	Gln	Gln	Thr	Thr	Ala	Leu	Pro	Thr	Trp	Gly	Leu	Ala	Pro	Ser
			195				200					205			
Gly	Lys	Gly	Arg	Gly	Leu	Gln	His	Pro	Pro	Pro	Val	Gly	Ser	Gln	Glu
	210					215					220				
Gly	Pro	Lys	Asp	Pro	Glu	Ala	Trp	Ser	Arg	Pro	Gln	Gly	Trp	Tyr	Asn
225					230					235					240
His	Ser	Gly	Lys												

<210> 141
 <211> 222

<212> PRT
<213> Homo sapiens

<400> 141

Met	Val	Lys	Leu	Tyr	Leu	Tyr	Gln	Lys	Asn	Val	Lys	Ile	Ala	Ile	Phe
1				5					10					15	
Asp	Leu	Lys	Ser	Arg	Gln	Asn	Phe	Phe	Val	Tyr	Phe	Arg	Glu	Glu	Gln
			20					25					30		
Ala	Arg	Glu	Leu	Tyr	Arg	Arg	Leu	Arg	Glu	Lys	Pro	Arg	Asp	Gln	Arg
			35				40					45			
Thr	Glu	Gly	Asp	Ser	Gln	Glu	Met	Val	Arg	Leu	Leu	Leu	Gln	Ala	Ile
	50					55					60				
Gln	Ser	Phe	Glu	Lys	Lys	Val	Arg	Val	Ile	Tyr	Thr	Gln	Leu	Ser	Lys
65					70					75					80
Thr	Val	Val	Cys	Lys	Gln	Lys	Ala	Leu	Glu	Leu	Leu	Pro	Lys	Val	Glu
				85					90					95	
Glu	Val	Val	Ser	Leu	Met	Asn	Glu	Asp	Glu	Lys	Thr	Val	Val	Arg	Leu
			100					105					110		
Gln	Glu	Lys	Arg	Gln	Lys	Glu	Leu	Trp	Asn	Leu	Leu	Lys	Ile	Ala	Cys
		115					120					125			
Ser	Lys	Val	Arg	Gly	Pro	Val	Ser	Gly	Ser	Pro	Asp	Ser	Met	Asn	Ala
	130					135					140				
Ser	Arg	Leu	Ser	Gln	Pro	Gly	Gln	Leu	Met	Ser	Gln	Pro	Ser	Thr	Ala
145					150					155					160
Ser	Asn	Ser	Leu	Pro	Glu	Pro	Ala	Lys	Lys	Ser	Glu	Glu	Leu	Val	Ala
			165						170					175	
Glu	Ala	His	Asn	Leu	Cys	Thr	Leu	Leu	Glu	Asn	Ala	Ile	Gln	Asp	Thr
			180					185					190		
Val	Arg	Glu	Gln	Asp	Gln	Ser	Phe	Thr	Ala	Leu	Asp	Trp	Ser	Trp	Leu
		195					200					205			
Gln	Thr	Glu	Glu	Glu	Glu	His	Ser	Cys	Leu	Glu	Gln	Ala	Ser		
	210					215					220				

<210> 142
<211> 409
<212> PRT
<213> Homo sapiens

<400> 142

Met	Arg	Leu	Thr	Leu	Leu	Cys	Cys	Thr	Trp	Arg	Glu	Glu	Arg	Met	Gly
1				5					10					15	

Glu	Glu	Gly	Ser	Glu	Leu	Pro	Val	Cys	Ala	Ser	Cys	Gly	Gln	Arg	Ile	20	25	30
Tyr	Asp	Gly	Gln	Tyr	Leu	Gln	Ala	Leu	Asn	Ala	Asp	Trp	His	Ala	Asp	35	40	45
Cys	Phe	Arg	Cys	Cys	Asp	Cys	Ser	Ala	Ser	Leu	Ser	His	Gln	Tyr	Tyr	50	55	60
Glu	Lys	Asp	Gly	Gln	Leu	Phe	Cys	Lys	Lys	Asp	Tyr	Trp	Ala	Arg	Tyr	65	70	75
Gly	Glu	Ser	Cys	His	Gly	Cys	Ser	Glu	Gln	Ile	Thr	Lys	Gly	Leu	Val	85	90	95
Met	Val	Ala	Gly	Glu	Leu	Lys	Tyr	His	Pro	Glu	Cys	Phe	Ile	Cys	Leu	100	105	110
Thr	Cys	Gly	Thr	Phe	Ile	Gly	Asp	Gly	Asp	Thr	Tyr	Thr	Leu	Val	Glu	115	120	125
His	Ser	Lys	Leu	Tyr	Cys	Gly	His	Cys	Tyr	Tyr	Gln	Thr	Val	Val	Thr	130	135	140
Pro	Val	Ile	Glu	Gln	Ile	Leu	Pro	Asp	Ser	Pro	Gly	Ser	His	Leu	Pro	145	150	155
His	Thr	Val	Thr	Leu	Val	Ser	Ile	Pro	Ala	Ser	Ser	His	Gly	Lys	Arg	165	170	175
Gly	Leu	Ser	Val	Ser	Ile	Asp	Pro	Pro	His	Gly	Pro	Pro	Gly	Cys	Gly	180	185	190
Thr	Glu	His	Ser	His	Thr	Val	Arg	Val	Gln	Gly	Val	Asp	Pro	Gly	Cys	195	200	205
Met	Ser	Pro	Asp	Val	Lys	Asn	Ser	Ile	His	Val	Gly	Asp	Arg	Ile	Leu	210	215	220
Glu	Ile	Asn	Gly	Thr	Pro	Ile	Arg	Asn	Val	Pro	Leu	Asp	Glu	Ile	Asp	225	230	235
Leu	Leu	Ile	Gln	Glu	Thr	Ser	Arg	Leu	Leu	Gln	Leu	Thr	Leu	Glu	His	245	250	255
Asp	Pro	His	Asp	Thr	Leu	Gly	His	Gly	Leu	Gly	Pro	Glu	Thr	Ser	Pro	260	265	270
Leu	Ser	Ser	Pro	Ala	Tyr	Thr	Pro	Ser	Gly	Glu	Ala	Gly	Ser	Ser	Ala	275	280	285
Arg	Gln	Lys	Pro	Val	Leu	Arg	Ser	Cys	Ser	Ile	Asp	Arg	Ser	Pro	Gly	290	295	300
Ala	Gly	Ser	Leu	Gly	Ser	Pro	Ala	Ser	Gln	Arg	Lys	Asp	Leu	Gly	Arg	305	310	315

Ser Glu Ser Leu Arg Val Val Cys Arg Pro His Arg Ile Phe Arg Pro
325 330 335

Ser Asp Leu Ile His Gly Glu Val Leu Gly Lys Gly Cys Phe Gly Gln
340 345 350

Ala Ile Lys Val Gln Ser Met Pro Gly Ser Gln Leu Asp Ser Leu Gly
355 360 365

Gly Thr Pro Pro Ser Ser Phe Leu Pro Ser Leu Trp Lys His Ser Gly
370 375 380

Arg Gly Ile Trp Leu Ser Asp Ser Leu Ala Ser Ala Leu Ser Ser Leu
385 390 395 400

Gly Leu Leu Glu Leu Ile Arg Asn Arg
405

<210> 143

<211> 305

<212> PRT

<213> Homo sapiens

<400> 143

Met Arg Leu Thr Leu Leu Cys Cys Thr Trp Arg Glu Glu Arg Met Gly
1 5 10 15

Glu Glu Gly Ser Glu Leu Pro Val Cys Ala Ser Cys Gly Gln Arg Ile
20 25 30

Tyr Asp Gly Gln Tyr Leu Gln Ala Leu Asn Ala Asp Trp His Ala Asp
35 40 45

Cys Phe Arg Cys Cys Asp Cys Ser Ala Ser Leu Ser His Gln Tyr Tyr
50 55 60

Glu Lys Asp Gly Gln Leu Phe Cys Lys Lys Asp Tyr Trp Ala Arg Tyr
65 70 75 80

Gly Glu Ser Cys His Gly Cys Ser Glu Gln Ile Thr Lys Gly Leu Val
85 90 95

Met Val Ala Gly Glu Leu Lys Tyr His Pro Glu Cys Phe Ile Cys Leu
100 105 110

Thr Cys Gly Thr Phe Ile Gly Asp Gly Asp Thr Tyr Thr Leu Val Glu
115 120 125

His Ser Lys Leu Tyr Cys Gly His Cys Tyr Tyr Gln Thr Val Val Thr
130 135 140

Pro Val Ile Glu Gln Ile Leu Pro Asp Ser Pro Gly Ser His Leu Pro
145 150 155 160

His Thr Val Thr Leu Val Ser Ile Pro Ala Ser Ser His Gly Lys Arg
165 170 175

Gly Leu Ser Val Ser Ile Asp Pro Pro His Gly Pro Pro Gly Cys Gly
 180 185 190
 Thr Glu His Ser His Thr Val Arg Val Gln Gly Val Asp Pro Gly Cys
 195 200 205
 Met Ser Pro Asp Val Lys Asn Ser Ile His Val Gly Asp Arg Ile Leu
 210 215 220
 Glu Ile Asn Gly Thr Pro Ile Arg Asn Val Pro Leu Asp Glu Ile Asp
 225 230 235 240
 Leu Leu Ile Gln Glu Thr Ser Arg Leu Leu Gln Leu Thr Leu Glu His
 245 250 255
 Asp Pro His Asp Thr Leu Gly His Gly Leu Gly Pro Glu Thr Ser Pro
 260 265 270
 Leu Ser Ser Pro Ala Tyr Thr Pro Ser Gly Glu Ala Gly Ser Ser Ala
 275 280 285
 Arg Gln Lys Pro Val Phe Ala Arg Thr Trp Val Ala Leu Ser Pro Ser
 290 295 300

Ala
305

<210> 144
 <211> 780
 <212> PRT
 <213> Homo sapiens

<400> 144

Met Ala Ser Asp Ala Val Gln Ser Glu Pro Arg Ser Trp Ser Leu Leu
 1 5 10 15
 Glu Gln Leu Gly Leu Ala Gly Ala Asp Leu Ala Ala Pro Gly Val Gln
 20 25 30
 Gln Gln Leu Glu Leu Glu Arg Glu Arg Leu Arg Arg Glu Ile Arg Lys
 35 40 45
 Glu Leu Lys Leu Lys Glu Gly Ala Glu Asn Leu Arg Arg Ala Thr Thr
 50 55 60
 Asp Leu Gly Arg Ser Leu Gly Pro Val Glu Leu Leu Leu Arg Gly Ser
 65 70 75 80
 Ser Arg Arg Leu Asp Leu Leu His Gln Gln Leu Gln Glu Leu His Ala
 85 90 95
 His Val Val Leu Pro Asp Pro Ala Ala Thr His Asp Gly Pro Gln Ser
 100 105 110
 Pro Gly Ala Gly Gly Pro Thr Cys Ser Ala Thr Asn Leu Ser Arg Val

115	120	125
Ala Gly Leu Glu Lys Gln 130	Leu Ala Ile Glu Leu Lys 135	Val Lys Gln Gly 140
Ala Glu Asn Met Ile Gln Thr Tyr Ser Asn Gly Ser Thr Lys Asp Arg 145		155 160
Lys Leu Leu Leu Thr Ala Gln Gln Met Leu Gln Asp Ser Lys Thr Lys 165	170	175
Ile Asp Ile Ile Arg Met Gln Leu Arg Arg Ala Leu Gln Ala Asp Gln 180	185	190
Leu Glu Asn Gln Ala Ala Pro Asp Asp Thr Gln Gly Ser Pro Asp Leu 195	200	205
Gly Ala Val Glu Leu Arg Ile Glu Glu Leu Arg His His Phe Arg Val 210	215	220
Glu His Ala Val Ala Glu Gly Ala Lys Asn Val Leu Arg Leu Leu Ser 225	230	235 240
Ala Ala Lys Ala Pro Asp Arg Lys Ala Val Ser Glu Ala Gln Glu Lys 245	250	255
Leu Thr Glu Ser Asn Gln Lys Leu Gly Leu Leu Arg Glu Ala Leu Glu 260	265	270
Arg Arg Leu Gly Glu Leu Pro Ala Asp His Pro Lys Gly Arg Leu Leu 275	280	285
Arg Glu Glu Leu Ala Ala Ala Ser Ser Ala Ala Phe Ser Thr Arg Leu 290	295	300
Ala Gly Pro Phe Pro Ala Thr His Tyr Ser Thr Leu Cys Lys Pro Ala 305	310	315 320
Pro Leu Thr Gly Thr Leu Glu Val Arg Val Val Gly Cys Arg Asp Leu 325	330	335
Pro Glu Thr Ile Pro Trp Asn Pro Thr Pro Ser Met Gly Gly Pro Gly 340	345	350
Thr Pro Asp Ser Arg Pro Pro Phe Leu Ser Arg Pro Ala Arg Gly Leu 355	360	365
Tyr Ser Arg Ser Gly Ser Leu Ser Gly Arg Ser Ser Leu Lys Ala Glu 370	375	380
Ala Glu Asn Thr Ser Glu Val Ser Thr Val Leu Lys Leu Asp Asn Thr 385	390	395 400
Val Val Gly Gln Thr Ser Trp Lys Pro Cys Gly Pro Asn Ala Trp Asp 405	410	415
Gln Ser Phe Thr Leu Glu Leu Glu Arg Ala Arg Glu Leu Glu Leu Ala		

420					425					430					
Val	Phe	Trp	Arg	Asp	Gln	Arg	Gly	Leu	Cys	Ala	Leu	Lys	Phe	Leu	Lys
		435					440					445			
Leu	Glu	Asp	Phe	Leu	Asp	Asn	Glu	Arg	His	Glu	Val	Gln	Leu	Asp	Met
		450				455					460				
Glu	Pro	Gln	Gly	Cys	Leu	Val	Ala	Glu	Val	Thr	Phe	Arg	Asn	Pro	Val
465					470					475					480
Ile	Glu	Arg	Ile	Pro	Arg	Leu	Arg	Arg	Gln	Lys	Lys	Ile	Phe	Ser	Lys
				485					490						495
Gln	Gln	Gly	Lys	Ala	Phe	Gln	Arg	Ala	Arg	Gln	Met	Asn	Ile	Asp	Val
			500					505						510	
Ala	Thr	Trp	Val	Arg	Leu	Leu	Arg	Arg	Leu	Ile	Pro	Asn	Ala	Thr	Gly
		515					520					525			
Thr	Gly	Thr	Phe	Ser	Pro	Gly	Ala	Ser	Pro	Gly	Ser	Glu	Ala	Arg	Thr
	530					535					540				
Thr	Gly	Asp	Ile	Ser	Val	Glu	Lys	Leu	Asn	Leu	Gly	Thr	Asp	Ser	Asp
545					550					555					560
Ser	Ser	Pro	Gln	Lys	Ser	Ser	Arg	Asp	Pro	Pro	Ser	Ser	Pro	Ser	Ser
				565					570					575	
Leu	Ser	Ser	Pro	Ile	Gln	Glu	Ser	Thr	Ala	Pro	Glu	Leu	Pro	Ser	Glu
			580					585					590		
Thr	Gln	Glu	Thr	Pro	Gly	Pro	Ala	Leu	Cys	Ser	Pro	Leu	Arg	Lys	Ser
		595					600						605		
Pro	Leu	Thr	Leu	Glu	Asp	Phe	Lys	Phe	Leu	Ala	Val	Leu	Gly	Arg	Gly
	610					615					620				
His	Phe	Gly	Lys	Val	Leu	Leu	Ser	Glu	Phe	Arg	Pro	Ser	Gly	Glu	Leu
625					630					635					640
Phe	Ala	Ile	Lys	Ala	Leu	Lys	Lys	Gly	Asp	Ile	Val	Ala	Arg	Asp	Glu
				645					650					655	
Val	Glu	Ser	Leu	Met	Cys	Glu	Lys	Arg	Ile	Leu	Ala	Ala	Val	Thr	Ser
			660					665					670		
Ala	Gly	His	Pro	Phe	Leu	Val	Asn	Leu	Phe	Gly	Cys	Phe	Gln	Thr	Pro
		675					680					685			
Glu	His	Val	Cys	Phe	Val	Met	Glu	Tyr	Ser	Ala	Gly	Gly	Asp	Leu	Met
	690					695					700				
Leu	His	Ile	His	Ser	Asp	Val	Phe	Ser	Glu	Pro	Arg	Ala	Ile	Phe	Tyr
705					710					715					720
Ser	Ala	Cys	Arg	Leu	Pro	Pro	Pro	Phe	Val	Pro	Thr	Leu	Ser	Gly	Arg

	725		730		735
Thr Asp Val	Ser Asn Phe Asp	Glu Glu Phe Thr Gly	Glu Ala Pro Thr		
	740		745	750	
Leu Ser Pro	Pro Arg Asp Ala Arg	Pro Leu Thr Ala	Ala Glu Gln Ala		
	755	760	765		
Ala Phe Leu	Asp Phe Asp Phe Val	Ala Gly Gly Cys			
	770	775	780		
<210>	145				
<211>	401				
<212>	PRT				
<213>	Homo sapiens				
<400>	145				
Met Ala Ser	Asp Ala Val Gln Ser	Glu Pro Arg Ser Trp	Ser Leu Leu		
1	5	10	15		
Glu Gln Leu	Gly Leu Ala Gly Ala	Asp Leu Ala Ala	Pro Gly Val Gln		
	20	25	30		
Gln Gln Leu	Glu Leu Glu Arg	Glu Arg Leu Arg	Arg Glu Ile Arg Lys		
	35	40	45		
Glu Leu Lys	Leu Lys Glu Gly	Ala Glu Asn Leu	Arg Arg Ala Thr Thr		
	50	55	60		
Asp Leu Gly	Arg Ser Leu Gly	Pro Val Glu Leu	Leu Leu Arg Gly Ser		
65	70	75	80		
Ser Arg Arg	Leu Asp Leu Leu	His Gln Gln Leu	Gln Glu Leu His Ala		
	85	90	95		
His Val Val	Leu Pro Asp Pro	Ala Ala Thr His	Asp Gly Pro Gln Ser		
	100	105	110		
Pro Gly Ala	Gly Gly Pro Thr	Cys Ser Ala Thr	Asn Leu Ser Arg Val		
	115	120	125		
Ala Gly Leu	Glu Lys Gln Leu	Ala Ile Glu Leu	Lys Val Lys Gln Gly		
	130	135	140		
Ala Glu Asn	Met Ile Gln Thr	Tyr Ser Asn Gly	Ser Thr Lys Asp Arg		
145	150	155	160		
Lys Leu Leu	Leu Thr Ala Gln	Gln Met Leu Gln	Asp Ser Lys Thr Lys		
	165	170	175		
Ile Asp Ile	Ile Arg Met Gln	Leu Arg Arg Ala	Leu Gln Ala Asp Gln		
	180	185	190		
Leu Glu Asn	Gln Ala Ala Pro	Asp Asp Thr Gln	Gly Ser Pro Asp Leu		
	195	200	205		

Gly Ala Val Glu Leu Arg Ile Glu Glu Leu Arg His His Phe Arg Val
 210 215 220
 Glu His Ala Val Ala Glu Gly Ala Lys Asn Val Leu Arg Leu Leu Ser
 225 230 235 240
 Ala Ala Lys Ala Pro Asp Arg Lys Ala Val Ser Glu Ala Gln Glu Lys
 245 250 255
 Leu Thr Glu Ser Asn Gln Lys Leu Gly Leu Leu Arg Glu Ala Leu Glu
 260 265 270
 Arg Arg Leu Gly Glu Leu Pro Ala Asp His Pro Lys Gly Arg Leu Leu
 275 280 285
 Arg Glu Glu Leu Ala Ala Ala Ser Ser Ala Ala Phe Ser Thr Arg Leu
 290 295 300
 Ala Gly Pro Phe Pro Ala Thr His Tyr Ser Thr Leu Cys Lys Pro Ala
 305 310 315 320
 Pro Leu Thr Gly Thr Leu Glu Val Arg Val Val Gly Cys Arg Asp Leu
 325 330 335
 Pro Glu Thr Ile Pro Trp Asn Pro Thr Pro Ser Met Gly Gly Pro Gly
 340 345 350
 Thr Pro Asp Ser Arg Pro Pro Phe Leu Ser Arg Pro Ala Arg Gly Leu
 355 360 365
 Tyr Ser Arg Ser Gly Ser Leu Ser Gly Arg Ser Ser Leu Lys Ala Glu
 370 375 380
 Ala Glu Asn Thr Ser Glu Val Ser Thr Val Leu Lys Leu Asp Asn Thr
 385 390 395 400

His

<210> 146
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 146

Met Gln Ser Phe Leu Val Glu Gly Arg Phe Lys His Glu Met Phe Glu
 1 5 10 15
 Lys Val Phe Ala Glu Glu Arg Asn Gly Gly Gln Arg Leu Leu Cys Ala
 20 25 30
 Thr Asp Val Pro Ile Arg Thr Val Ser Ser Ala Ala Ser Gln Gly Leu
 35 40 45
 His Met Gln Asn Asp Asp Ala Cys Leu Gly Ala Ala Ser Pro Ser Ala
 50 55 60

Ala Ser Trp Ser Arg Arg Ser Ala Glu Ser Lys Val Ser Leu Cys Trp
65 70 75 80

Lys Leu Lys Trp Lys Glu Asp Leu Val Trp Phe Tyr Ser Gln Ser His
85 90 95

<210> 147
<211> 333
<212> PRT
<213> Homo sapiens

<400> 147

Met His Arg Tyr Phe Glu Ser Pro Arg Arg Leu Leu Pro Val His Phe
1 5 10 15

Cys Cys Cys Gln Trp Arg Gly Gly Gly Val Asp Phe Glu Cys Leu Leu
20 25 30

Gly Gly Val Trp Asp Arg Cys Arg Lys Val Leu Arg Ala Gln Glu Cys
35 40 45

Glu Trp Pro Arg His Leu Pro Ser Ala Cys Leu Leu Ser Ser Ala Cys
50 55 60

Arg Gly Gln Pro Glu Arg Arg Ala Ala Val Val Gly Ala Gln Asp Pro
65 70 75 80

Thr Glu Pro Pro Arg Leu Ser Arg Ser Leu Ser Gly Ala Ser Pro Phe
85 90 95

Leu Gly Glu Thr Lys Gln Glu Thr Leu Thr Asn Ile Ser Ala Val Asn
100 105 110

Tyr Asp Phe Asp Glu Glu Tyr Phe Ser Asn Thr Ser Glu Leu Ala Lys
115 120 125

Asp Phe Ile Arg Arg Leu Leu Val Lys Asp Pro Lys Arg Arg Met Thr
130 135 140

Ile Ala Gln Ser Leu Glu His Ser Trp Ile Lys Ala Ile Arg Arg Arg
145 150 155 160

Asn Val Arg Gly Glu Asp Ser Gly Arg Lys Pro Glu Arg Arg Arg Leu
165 170 175

Lys Thr Thr Arg Leu Lys Glu Tyr Thr Ile Lys Ser His Ser Ser Leu
180 185 190

Pro Pro Asn Asn Ser Tyr Ala Asp Phe Glu Arg Phe Ser Lys Val Leu
195 200 205

Glu Glu Ala Ala Ala Glu Glu Gly Leu Arg Glu Leu Gln Arg Ser
210 215 220

Arg Arg Leu Cys His Glu Asp Val Glu Ala Leu Ala Ala Ile Tyr Glu

225		230		235		240
Glu Lys Glu Ala Trp Tyr Arg Glu Glu Ser Asp Ser Leu Gly Gln Asp						
		245		250		255
Leu Arg Arg Leu Arg Gln Glu Leu Leu Lys Thr Glu Ala Leu Lys Arg						
		260		265		270
Gln Ala Gln Glu Glu Ala Lys Gly Ala Leu Leu Gly Thr Ser Gly Leu						
		275		280		285
Lys Arg Arg Phe Ser Arg Leu Glu Asn Arg Tyr Glu Ala Leu Ala Lys						
		290		295		300
Gln Val Ala Ser Glu Met Arg Phe Val Gln Asp Leu Val Arg Ala Leu						
305		310		315		320
Glu Gln Glu Lys Leu Gln Gly Val Glu Cys Gly Leu Arg						
		325		330		

<210> 148
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 148

Met Leu Lys Glu Phe Leu Glu Ile Pro Phe Pro Thr Ser Pro Glu Cys						
1		5		10		15
Thr Leu Gln Pro Lys Ser Gln Gln Pro Thr Gly Lys Glu Ala Glu Glu						
		20		25		30
His Pro Thr Ser Ala Pro Leu Thr His Ser Leu Leu Pro Pro Thr Pro						
		35		40		45
Leu Trp Val Val Ser His Phe Ile Phe Asp Phe Arg Gly Glu Thr Ala						
		50		55		60
Leu His Lys Ala Ala Cys Gln Arg Asn Arg Ala Val Cys Gln Leu Leu						
65		70		75		80
Val Asp Ala Gly Ala Ser Leu Arg Lys Thr Asp Ser Lys Gly Lys Thr						
		85		90		95
Pro Gln Glu Arg Ala Gln Gln Ala Gly Asp Pro Asp Leu Ala Ala Tyr						
		100		105		110
Leu Glu Ser Arg Gln Asn Tyr Lys Val Ile Gly His Glu Asp Leu Glu						
		115		120		125
Thr Ala Val						
		130				

<210> 149
 <211> 272
 <212> PRT

<213> Homo sapiens

<400> 149

Met Arg Gly Ala Ala Arg Leu Gly Arg Pro Gly Arg Ser Cys Leu Pro
1 5 10 15
Gly Pro Ala Leu Arg Ala Pro Pro Arg Pro Pro Leu Leu Leu Leu Leu
20 25 30
Ala Leu Leu Pro Leu Leu Pro Ala Pro Gly Ala Ala Ala Ala Pro Ala
35 40 45
Pro Arg Pro Pro Glu Leu Gln Ser Ala Ser Ala Gly Pro Ser Val Ser
50 55 60
Leu Tyr Leu Ser Glu Asp Glu Val Arg Arg Leu Ile Gly Leu Asp Ala
65 70 75 80
Glu Leu Tyr Tyr Val Arg Asn Asp Leu Ile Ser His Tyr Ala Leu Ser
85 90 95
Phe Ser Leu Leu Val Pro Ser Glu Thr Asn Phe Leu His Phe Thr Trp
100 105 110
His Ala Lys Ser Lys Val Glu Tyr Lys Leu Gly Phe Gln Val Asp Asn
115 120 125
Val Leu Ala Met Asp Met Pro Gln Val Asn Ile Ser Val Gln Gly Glu
130 135 140
Val Pro Arg Thr Leu Ser Val Phe Arg Val Glu Leu Ser Cys Thr Gly
145 150 155 160
Lys Val Asp Ser Glu Val Met Ile Leu Met Gln Leu Asn Leu Thr Val
165 170 175
Asn Ser Ser Lys Asn Phe Thr Val Leu Asn Phe Lys Arg Arg Lys Met
180 185 190
Cys Tyr Lys Lys Leu Glu Glu Val Lys Thr Ser Ala Leu Asp Lys Asn
195 200 205
Thr Ser Arg Thr Ile Tyr Asp Pro Val His Ala Ala Pro Thr Thr Ser
210 215 220
Thr Arg Val Phe Tyr Ile Ser Val Gly Val Cys Cys Ala Val Ile Phe
225 230 235 240
Leu Val Ala Ile Ile Leu Ala Val Leu His Leu His Ser Met Lys Arg
245 250 255
Ile Glu Leu Asp Asp Arg Tyr Cys Thr Tyr Phe Gly Lys Glu Lys Lys
260 265 270

<210> 150

<211> 344

<212> PRT
<213> Homo sapiens

<400> 150

Met	Pro	Gln	Val	Asn	Ile	Ser	Val	Gln	Gly	Glu	Val	Pro	Arg	Thr	Leu
1				5					10					15	
Ser	Val	Phe	Arg	Val	Glu	Leu	Ser	Cys	Thr	Gly	Lys	Val	Asp	Ser	Glu
			20					25					30		
Val	Met	Ile	Leu	Met	Gln	Leu	Asn	Leu	Thr	Val	Asn	Ser	Ser	Lys	Asn
		35					40					45			
Phe	Thr	Val	Leu	Asn	Phe	Lys	Arg	Arg	Lys	Met	Cys	Tyr	Lys	Lys	Leu
	50					55					60				
Glu	Glu	Val	Lys	Thr	Ser	Ala	Leu	Asp	Lys	Asn	Thr	Ser	Arg	Thr	Ile
65					70					75					80
Tyr	Asp	Pro	Val	His	Ala	Ala	Pro	Thr	Thr	Ser	Thr	Arg	Val	Phe	Tyr
				85					90					95	
Ile	Ser	Val	Gly	Val	Cys	Cys	Ala	Val	Ile	Phe	Leu	Val	Ala	Ile	Ile
			100					105					110		
Leu	Ala	Val	Leu	His	Leu	His	Ser	Met	Lys	Arg	Ile	Glu	Leu	Asp	Asp
		115					120					125			
Ser	Ile	Ser	Ala	Ser	Ser	Ser	Ser	Gln	Gly	Leu	Ser	Gln	Pro	Ser	Thr
	130					135					140				
Gln	Thr	Thr	Gln	Tyr	Leu	Arg	Ala	Asp	Thr	Pro	Asn	Asn	Ala	Thr	Pro
145					150					155					160
Ile	Thr	Ser	Ser	Tyr	Tyr	Pro	Thr	Leu	Arg	Ile	Glu	Lys	Asn	Asp	Leu
				165					170					175	
Arg	Ser	Val	Thr	Leu	Leu	Glu	Ala	Lys	Gly	Lys	Val	Lys	Asp	Ile	Ala
			180					185					190		
Ile	Ser	Arg	Glu	Arg	Ile	Thr	Leu	Lys	Asp	Val	Leu	Gln	Glu	Gly	Thr
		195					200					205			
Phe	Gly	Arg	Ile	Phe	His	Gly	Ile	Leu	Ile	Asp	Glu	Lys	Asp	Pro	Asn
	210					215					220				
Lys	Glu	Lys	Gln	Ala	Phe	Val	Lys	Thr	Val	Lys	Asp	Gln	Ala	Ser	Glu
225					230					235					240
Ile	Gln	Val	Thr	Met	Met	Leu	Thr	Glu	Ser	Cys	Lys	Leu	Arg	Gly	Leu
				245					250					255	
His	His	Arg	Asn	Leu	Leu	Pro	Ile	Thr	His	Val	Cys	Ile	Glu	Glu	Gly
			260					265					270		
Glu	Lys	Pro	Met	Val	Ile	Leu	Pro	Tyr	Met	Asn	Trp	Gly	Asn	Leu	Lys

275 280 285
 Leu Phe Leu Arg Gln Cys Lys Leu Val Glu Ala Asn Asn Pro Gln Ala
 290 295 300
 Ile Ser Gln Gln Asp Leu Val His Met Ala Ile Gln Ile Ala Cys Gly
 305 310 315 320
 Met Ser Tyr Leu Ala Arg Arg Glu Val Ile His Lys Asp Leu Ala Ala
 325 330 335
 Arg Asn Cys Val Gly Pro Leu Glu
 340

<210> 151
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 151

Met Glu Ala Ile Arg Thr Asp Asn Gln Asn Phe Ala Ser Gln Leu Arg
 1 5 10 15
 Glu Ala Glu Ala Arg Asn Arg Asp Leu Glu Ala His Val Arg Gln Leu
 20 25 30
 Gln Glu Arg Met Glu Leu Leu Gln Ala Glu Gly Ala Thr Ala Val Thr
 35 40 45
 Gly Val Pro Ser Pro Arg Ala Thr Asp Pro Pro Ser His Leu Asp Gly
 50 55 60
 Pro Pro Ala Val Ala Val Gly Gln Cys Pro Leu Val Gly Pro Gly Pro
 65 70 75 80
 Met His Arg Arg His Leu Leu Leu Pro Ala Arg Val Pro Arg Pro Gly
 85 90 95
 Leu Ser Glu Ala Leu Ser Leu Leu Leu Phe Ala Val Val Leu Ser Arg
 100 105 110
 Ala Ala Ala Leu Gly Cys Ile Gly Leu Val Ala His Ala Gly Gln Leu
 115 120 125
 Thr Ala Val Trp Arg Arg Pro Gly Ala Ala Arg Ala Pro
 130 135 140

<210> 152
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 152

Met Glu Leu Leu Gln Ala Glu Gly Ala Thr Ala Val Thr Gly Val Pro
 1 5 10 15

Ser Pro Arg Ala Thr Asp Pro Pro Ser His Leu Asp Gly Pro Pro Ala
20 25 30

Val Ala Val Gly Gln Cys Pro Leu Val Gly Pro Gly Pro Met His Arg
35 40 45

Arg His Leu Leu Leu Pro Ala Arg Val Pro Arg Pro Gly Leu Ser Glu
50 55 60

Ala Leu Ser Leu Leu Leu Phe Ala Val Val Leu Ser Arg Ala Ala Ala
65 70 75 80

Leu Gly Cys Ile Gly Leu Val Ala His Ala Gly Gln Leu Thr Ala Val
85 90 95

Trp Arg Arg Pro Gly Ala Ala Arg Ala Pro
100 105

<210> 153
<211> 50
<212> PRT
<213> Homo sapiens

<400> 153

Met Val Asn Leu Ser His Glu Asp Phe Glu Phe Ile Ser Gly Thr Arg
1 5 10 15

Met Arg Lys Leu Ala Arg Glu Gly Gln Lys Pro Pro Glu Gly Phe Met
20 25 30

Ala Pro Lys Ala Trp Thr Val Leu Thr Glu Tyr Tyr Lys Ser Leu Glu
35 40 45

Lys Ala
50

<210> 154
<211> 238
<212> PRT
<213> Homo sapiens

<400> 154

Met Ala Arg Thr Thr Ser Gln Leu Tyr Asp Ala Val Pro Ile Gln Ser
1 5 10 15

Ser Val Val Leu Cys Ser Cys Pro Ser Pro Ser Met Val Arg Thr Gln
20 25 30

Thr Glu Ser Ser Thr Pro Pro Gly Ile Pro Gly Gly Ser Arg Gln Gly
35 40 45

Pro Ala Met Asp Gly Thr Ala Ala Glu Pro Arg Pro Gly Ala Gly Ser
50 55 60

Leu Gln His Ala Gln Pro Pro Pro Gln Pro Arg Lys Lys Arg Pro Glu
65 70 75 80

Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly Ser Phe Ser Thr Val
85 90 95

Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu Tyr Ala Ile Lys Ile
100 105 110

Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys Val Pro Tyr Val Thr
115 120 125

Arg Glu Arg Asp Val Met Ser Arg Leu Asp His Pro Phe Phe Val Lys
130 135 140

Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu Tyr Phe Gly Leu Ser
145 150 155 160

Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg Lys Ile Gly Ser
165 170 175

Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu Ile Val Ser Ala
180 185 190

Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg Asp Leu Lys Pro
195 200 205

Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln Ile Thr Asp Phe
210 215 220

Gly Thr Ala Lys Val Leu Ser Pro Glu Ser Lys Gln Val Cys
225 230 235

<210> 155
<211> 73
<212> PRT
<213> Homo sapiens

<400> 155

Met Ser Asp Val Thr Ile Val Lys Glu Gly Trp Val Gln Lys Arg Gly
1 5 10 15

Glu Tyr Ile Lys Asn Trp Arg Pro Arg Tyr Phe Leu Leu Lys Thr Asp
20 25 30

Gly Ser Phe Ile Gly Tyr Lys Glu Lys Pro Gln Asp Val Asp Leu Pro
35 40 45

Tyr Pro Leu Asn Asn Phe Ser Val Ala Ser Ser Val Met Phe Arg Tyr
50 55 60

Leu Gln Asn Leu Thr Leu Asn Gln Val
65 70

<210> 156
<211> 213

<212> PRT
<213> Homo sapiens

<400> 156

Met Ser Asp Val Thr Ile Val Lys Glu Gly Trp Val Gln Lys Arg Gly
1 5 10 15
Glu Tyr Ile Lys Asn Trp Arg Pro Arg Tyr Phe Leu Leu Lys Thr Asp
20 25 30
Gly Ser Phe Ile Gly Tyr Lys Glu Lys Pro Gln Asp Val Asp Leu Pro
35 40 45
Tyr Pro Leu Asn Asn Phe Ser Val Ala Lys Cys Gln Leu Met Lys Thr
50 55 60
Glu Arg Pro Lys Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp Thr
65 70 75 80
Thr Val Ile Glu Arg Thr Phe His Val Asp Thr Pro Glu Glu Arg Glu
85 90 95
Glu Trp Thr Glu Ala Ile Gln Ala Val Ala Asp Arg Leu Gln Arg Gln
100 105 110
Glu Glu Glu Arg Met Asn Cys Ser Pro Thr Ser Gln Ile Asp Asn Ile
115 120 125
Gly Glu Glu Glu Met Asp Ala Ser Thr Thr His His Lys Arg Lys Thr
130 135 140
Met Asn Asp Phe Asp Tyr Leu Lys Leu Leu Gly Lys Gly Thr Phe Gly
145 150 155 160
Lys Val Ile Leu Val Arg Glu Lys Ala Ser Gly Lys Tyr Tyr Ala Met
165 170 175
Lys Ile Leu Lys Lys Glu Val Ile Ile Ala Lys Val Thr Asp Leu Leu
180 185 190
Lys Leu Ile Thr Lys Phe Leu Phe Ala Val Cys Met Cys Leu Trp Ala
195 200 205
His Glu Phe Thr Cys
210

<210> 157
<211> 352
<212> PRT
<213> Homo sapiens

<400> 157

Met Gly Gly Lys Pro Ala Asn Arg Met Met Pro Tyr Pro Phe Pro Ser
1 5 10 15

Gly	Thr	Trp	Lys	Val	Lys	Trp	Val	Ala	Ser	Arg	Asn	Ala	Phe	Lys	Pro	20	25	30	
Arg	Ile	Gly	Ile	Leu	Ile	Lys	Thr	Leu	Ile	Tyr	Ser	Ser	Gln	Phe	Pro	35	40	45	
Leu	Gly	Asn	Leu	Glu	Lys	Ile	Ser	Gln	Leu	Leu	Ser	Lys	Ser	Ala	Gln	50	55	60	
Cys	Pro	Leu	Arg	Val	His	Tyr	Leu	Ser	Ser	Gln	Tyr	Gly	Asp	Glu	Arg	65	70	75	80
Cys	Phe	Met	Phe	Val	Leu	Ile	Ser	Pro	Thr	Lys	Ser	Val	Ile	Ile	Thr	85	90	95	
Ile	Leu	Ser	Leu	Leu	Phe	Thr	Leu	Gln	Leu	Phe	Phe	His	Leu	Ser	Arg	100	105	110	
Glu	Arg	Val	Phe	Ser	Glu	Asp	Arg	Thr	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	115	120	125	
Val	Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Gly	Lys	Ile	Val	Tyr	Arg	Asp	130	135	140	
Leu	Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	145	150	155	160
Thr	Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Ile	Thr	Asp	Ala	Ala	Thr	Met	165	170	175	
Lys	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu	Glu	180	185	190	
Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	Val	Val	195	200	205	
Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	Asp	His	210	215	220	
Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Asp	Ile	Lys	Phe	Pro	Arg	225	230	235	240
Thr	Leu	Ser	Ser	Asp	Ala	Lys	Ser	Leu	Leu	Ser	Gly	Leu	Leu	Ile	Lys	245	250	255	
Asp	Pro	Asn	Lys	Arg	Leu	Gly	Gly	Gly	Pro	Asp	Asp	Ala	Lys	Glu	Ile	260	265	270	
Met	Arg	His	Ser	Phe	Phe	Ser	Gly	Val	Asn	Trp	Gln	Asp	Val	Tyr	Asp	275	280	285	
Lys	Lys	Leu	Val	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	Ser	Glu	Thr	Asp	290	295	300	
Thr	Arg	Tyr	Phe	Asp	Glu	Glu	Phe	Thr	Ala	Gln	Thr	Ile	Thr	Ile	Thr	305	310	315	320

Pro Pro Glu Lys Tyr Asp Glu Asp Gly Met Asp Cys Met Asp Asn Glu
325 330 335

Arg Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Gly Arg Glu
340 345 350

<210> 158
<211> 132
<212> PRT
<213> Homo sapiens

<400> 158

Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys
1 5 10 15

Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Gly Asn Ser Lys Lys
20 25 30

Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln
35 40 45

Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His
50 55 60

Ser Gly Pro Glu Ile Ser Arg Ile Ile Val Asp Pro Thr Thr Gly Lys
65 70 75 80

Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys
85 90 95

Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile
100 105 110

Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Val Cys
115 120 125

Met Thr Leu Glu
130

<210> 159
<211> 192
<212> PRT
<213> Homo sapiens

<400> 159

Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys
1 5 10 15

Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Gly Asn Ser Lys Lys
20 25 30

Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln
35 40 45

Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His

50	55	60
Ser Gly Pro Glu Ile	Ser Arg Ile Ile Val	Asp Pro Thr Thr Gly Lys
65	70	75 80
Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys		
	85	90 95
Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile		
	100	105 110
Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Ile Asp		
	115	120 125
Lys Glu Ile Glu Leu His Arg Ile Leu His His Lys His Val Val Gln		
	130	135 140
Phe Tyr His Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu		
145	150	155 160
Tyr Cys Ser Arg Arg Val Ser Val Asn Ser Tyr Leu Arg Thr Phe Ala		
	165	170 175
Tyr Pro Glu Leu Thr Trp Tyr Ser Lys Ser Ile Leu Ser Gly Ile Thr		
	180	185 190
<210> 160		
<211> 207		
<212> PRT		
<213> Homo sapiens		
<400> 160		
Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys		
1	5	10 15
Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Gly Asn Ser Lys Lys		
	20	25 30
Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln		
	35	40 45
Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His		
	50	55 60
Ser Gly Pro Glu Ile Ser Arg Ile Ile Val Asp Pro Thr Thr Gly Lys		
65	70	75 80
Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys		
	85	90 95
Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile		
	100	105 110
Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Ile Asp		
	115	120 125

Lys Glu Ile Glu Leu His Arg Ile Leu His His Lys His Val Val Gln
130 135 140

Phe Tyr His Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu
145 150 155 160

Tyr Cys Ser Arg Arg Leu Gln Gly Ser Gln Lys Asn Asp Leu Glu Tyr
165 170 175

Val Glu Glu Asp Gly His Val Val Val Arg Lys Gln Phe Pro Cys Gly
180 185 190

Leu Leu Asp Trp Val Glu Pro Glu Gln Ala Lys Ala Tyr Ser Ser
195 200 205

<210> 161

<211> 337

<212> PRT

<213> Homo sapiens

<400> 161

Met Ser Asp Lys Asp Leu Arg Thr Ala Ala Ala Gly Gly Gly His Leu
1 5 10 15

Val Ala Ile Leu Thr Val Phe Ile Pro Gln Lys Asp Leu Val Glu Glu
20 25 30

Glu Ala Glu Glu Ala Gly Val Ala Leu Arg Ser Thr Gln Ser Thr Leu
35 40 45

Gln Ala Gly Leu Ala Ala Asp Ala Trp Ala Ala Pro Ile Ala Met Gln
50 55 60

Ile Tyr Lys Lys His Leu Asp Pro Arg Pro Gly Pro Cys His Leu Ser
65 70 75 80

Trp Ala Trp Ala Trp Ala Ser Trp Pro Ala Ala Ala Cys Thr Ala Gly
85 90 95

Pro Lys Gly Arg Pro Pro Met Thr Gln Val Tyr Glu Arg Leu Glu Lys
100 105 110

Leu Gln Ala Val Val Ala Gly Val Pro Gly His Leu Glu Ala Ala Ser
115 120 125

Cys Ile Pro Phe Pro Gln Glu Asn Ser Tyr Val Ser Ser Thr Gly Arg
130 135 140

Ala Ser Ala Gln Ala Ala Glu Gln Leu Gln Arg Gly Pro Asn Gln Pro
145 150 155 160

Val Glu Ser Asp Glu Ser Leu Gly Gly Leu Ser Ala Ala Leu Arg Ser
165 170 175

Trp His Leu Thr Pro Ser Cys Pro Leu Asp Pro Ala Pro Leu Arg Glu
180 185 190

Ala Gly Cys Pro Gln Gly Asp Thr Ala Gly Glu Ser Ser Trp Gly Ser
 195 200 205
 Gly Pro Gly Ser Arg Pro Thr Ala Val Glu Gly Leu Ala Leu Gly Ser
 210 215 220
 Ser Ala Ser Ser Ser Ser Glu Pro Pro Gln Ile Ile Ile Asn Pro Ala
 225 230 235 240
 Arg Gln Lys Met Val Gln Lys Leu Ala Leu Tyr Glu Asp Gly Ala Leu
 245 250 255
 Asp Ser Leu Gln Leu Leu Ser Ser Ser Ser Leu Pro Gly Leu Gly Leu
 260 265 270
 Glu Gln Asp Arg Gln Gly Pro Lys Lys Val Met Asn Phe Arg Ala Asp
 275 280 285
 Val Phe Thr Trp Ala Asp Pro Pro Asn Pro Glu Val Lys Val Leu Met
 290 295 300
 Val Arg Ser Ser His Gly Ala Arg Val Leu Ser Thr Leu Pro Ala Val
 305 310 315 320
 Gly Val Gly Ala His Ala Arg Trp Gly Glu Lys Glu Val Ala Leu Leu
 325 330 335

Phe

<210> 162
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 162

Met Gly His Ala Leu Cys Val Cys Ser Arg Gly Thr Val Ile Ile Asp
 1 5 10 15
 Asn Lys Arg Tyr Leu Phe Ile Gln Lys Leu Gly Glu Gly Gly Phe Ser
 20 25 30
 Tyr Val Asp Leu Val Glu Gly Leu His Asp Gly His Phe Tyr Ala Leu
 35 40 45
 Lys Arg Ile Leu Cys His Glu Gln Gln Asp Arg Glu Glu Ala Gln Arg
 50 55 60
 Glu Ala Asp Met His Arg Leu Phe Asn His Pro Asn Ile Leu Arg Leu
 65 70 75 80
 Val Ala Tyr Cys Leu Arg Glu Arg Gly Ala Lys His Glu Ala Trp Leu
 85 90 95
 Leu Leu Pro Phe Phe Lys Val Arg Lys Thr Pro Val Tyr Gly Gly Gly

	100		105		110
Cys Ser Arg Ala Thr Tyr Ser Arg Ala Val					
	115		120		
<210>	163				
<211>	842				
<212>	PRT				
<213>	Homo sapiens				
<400>	163				
Met Glu Arg Ala Ile Ser Pro Gly Leu Leu Val Arg Ala Leu Leu Leu					
1	5		10		15
Leu Leu Leu Leu Gly Leu Ala Ala Arg Thr Val Ala Ala Gly Arg Ala					
	20		25		30
Arg Gly Leu Pro Ala Pro Thr Ala Glu Ala Ala Phe Gly Leu Gly Ala					
	35		40		45
Ala Ala Ala Pro Thr Ser Ala Thr Arg Val Pro Ala Ala Gly Ala Val					
	50		55		60
Ala Ala Ala Glu Val Thr Val Glu Asp Ala Glu Ala Leu Pro Ala Ala					
65	70		75		80
Ala Gly Glu Gln Glu Pro Arg Gly Pro Glu Pro Asp Asp Glu Thr Glu					
	85		90		95
Leu Arg Pro Arg Gly Arg Ser Leu Val Ile Ile Ser Thr Leu Asp Gly					
	100		105		110
Arg Ile Ala Ala Leu Asp Pro Glu Asn His Gly Lys Lys Gln Trp Asp					
	115		120		125
Leu Asp Val Gly Ser Gly Ser Leu Val Ser Ser Ser Leu Ser Lys Pro					
	130		135		140
Glu Val Phe Gly Asn Lys Met Ile Ile Pro Ser Leu Asp Gly Ala Leu					
145	150		155		160
Phe Gln Trp Asp Arg Asp Arg Glu Ser Met Glu Thr Val Pro Phe Thr					
	165		170		175
Val Glu Ser Leu Leu Glu Ser Ser Tyr Lys Phe Gly Asp Asp Val Val					
	180		185		190
Leu Val Gly Gly Lys Ser Leu Thr Thr Tyr Gly Leu Ser Ala Tyr Ser					
	195		200		205
Gly Lys Val Arg Tyr Ile Cys Ser Ala Leu Gly Cys Arg Gln Trp Asp					
	210		215		220
Ser Asp Glu Met Glu Gln Glu Glu Asp Ile Leu Leu Leu Gln Arg Thr					
225	230		235		240

Gln Lys Thr Val Arg Ala Val Gly Pro Arg Ser Gly Asn Glu Lys Trp
 245 250 255
 Asn Phe Ser Val Gly His Phe Glu Leu Arg Tyr Ile Pro Asp Met Glu
 260 265 270
 Thr Arg Ala Gly Phe Ile Glu Ser Thr Phe Lys Pro Asn Glu Asn Thr
 275 280 285
 Glu Glu Ser Lys Ile Ile Ser Asp Val Glu Glu Gln Glu Ala Ala Ile
 290 295 300
 Met Asp Ile Val Ile Lys Val Ser Val Ala Asp Trp Lys Val Met Ala
 305 310 315 320
 Phe Ser Lys Lys Gly Gly His Leu Glu Trp Glu Tyr Gln Phe Cys Thr
 325 330 335
 Pro Ile Ala Ser Ala Trp Leu Leu Lys Asp Gly Lys Val Ile Pro Ile
 340 345 350
 Ser Leu Phe Asp Asp Thr Ser Tyr Thr Ser Asn Asp Asp Val Leu Glu
 355 360 365
 Asp Glu Glu Asp Ile Val Glu Ala Ala Arg Gly Ala Thr Glu Asn Ser
 370 375 380
 Val Tyr Leu Gly Met Tyr Arg Gly Gln Leu Tyr Leu Gln Ser Ser Val
 385 390 395 400
 Arg Ile Ser Glu Lys Phe Pro Ser Ser Pro Lys Ala Leu Glu Ser Val
 405 410 415
 Thr Asn Glu Asn Ala Ile Ile Pro Leu Pro Thr Ile Lys Trp Lys Pro
 420 425 430
 Leu Ile His Ser Pro Ser Arg Thr Pro Val Leu Val Gly Ser Asp Glu
 435 440 445
 Phe Asp Lys Cys Leu Ser Asn Asp Lys Phe Ser His Glu Glu Tyr Ser
 450 455 460
 Asn Gly Ala Leu Ser Ile Leu Gln Tyr Pro Tyr Asp Asn Gly Tyr Tyr
 465 470 475 480
 Leu Pro Tyr Tyr Lys Arg Glu Arg Asn Lys Arg Ser Thr Gln Ile Thr
 485 490 495
 Val Arg Phe Leu Asp Asn Pro His Tyr Asn Lys Asn Ile Arg Lys Lys
 500 505 510
 Asp Pro Val Leu Leu Leu His Trp Trp Lys Glu Ile Val Ala Thr Ile
 515 520 525
 Leu Phe Cys Ile Ile Ala Thr Thr Phe Ile Val Arg Arg Leu Phe His
 530 535 540

Pro	His	Pro	His	Arg	Gln	Arg	Lys	Glu	Ser	Glu	Thr	Gln	Cys	Gln	Thr	545	550	555	560
Glu	Asn	Lys	Tyr	Asp	Ser	Val	Ser	Gly	Glu	Ala	Asn	Asp	Ser	Ser	Trp	565	570	575	
Asn	Asp	Ile	Lys	Asn	Ser	Gly	Tyr	Ile	Ser	Arg	Tyr	Leu	Thr	Asp	Phe	580	585	590	
Glu	Pro	Ile	Gln	Cys	Leu	Gly	Arg	Gly	Gly	Phe	Gly	Val	Val	Phe	Glu	595	600	605	
Ala	Lys	Asn	Lys	Val	Asp	Asp	Cys	Asn	Tyr	Ala	Ile	Lys	Arg	Ile	Arg	610	615	620	
Leu	Pro	Asn	Arg	Glu	Leu	Ala	Arg	Glu	Lys	Val	Met	Arg	Glu	Val	Lys	625	630	635	640
Ala	Leu	Ala	Lys	Leu	Glu	His	Pro	Gly	Ile	Val	Arg	Tyr	Phe	Asn	Ala	645	650	655	
Trp	Leu	Glu	Ala	Pro	Pro	Glu	Lys	Trp	Gln	Glu	Lys	Met	Asp	Glu	Ile	660	665	670	
Trp	Leu	Lys	Asp	Glu	Ser	Thr	Asp	Trp	Pro	Leu	Ser	Ser	Pro	Ser	Pro	675	680	685	
Met	Asp	Ala	Pro	Ser	Val	Lys	Ile	Arg	Arg	Met	Asp	Pro	Phe	Ser	Thr	690	695	700	
Lys	Glu	His	Ile	Glu	Ile	Ile	Ala	Pro	Ser	Pro	Gln	Arg	Ser	Arg	Ser	705	710	715	720
Phe	Ser	Val	Gly	Ile	Ser	Cys	Asp	Gln	Thr	Ser	Ser	Ser	Glu	Ser	Gln	725	730	735	
Phe	Ser	Pro	Leu	Glu	Phe	Ser	Gly	Met	Asp	His	Glu	Asp	Ile	Ser	Glu	740	745	750	
Ser	Val	Asp	Ala	Ala	Tyr	Asn	Leu	Gln	Asp	Ser	Cys	Leu	Thr	Asp	Cys	755	760	765	
Asp	Val	Glu	Asp	Gly	Thr	Met	Asp	Gly	Asn	Asp	Glu	Gly	His	Ser	Phe	770	775	780	
Glu	Leu	Cys	Pro	Ser	Glu	Ala	Ser	Pro	Tyr	Val	Arg	Ser	Arg	Glu	Arg	785	790	795	800
Thr	Ser	Ser	Ser	Ile	Val	Phe	Glu	Asp	Ser	Gly	Cys	Asp	Asn	Ala	Ser	805	810	815	
Ser	Lys	Glu	Glu	Pro	Lys	Thr	Asn	Arg	Leu	His	Ile	Gly	Asn	His	Cys	820	825	830	
Ala	Asn	Lys	Leu	Thr	Val	Thr	Val	Leu	Phe							835	840		

<210> 164
<211> 743
<212> PRT
<213> Homo sapiens

<400> 164

Met	Gly	Ser	Arg	Ala	Gln	Lys	Ser	Ala	Gly	Asn	Ala	Glu	Leu	Trp	Glu	
1				5					10					15		
Pro	Leu	Pro	Glu	Gly	Arg	Pro	Arg	Pro	Ala	Gly	Thr	Ser	Ser	Ala	Val	
			20					25					30			
Ser	Ala	Trp	Ala	Ser	Leu	Lys	Leu	Cys	Leu	Arg	Gly	Gly	Ser	Gly	Arg	
		35					40					45				
Arg	Gln	Arg	Leu	Gly	Gly	Gly	Arg	Met	Gln	Pro	Glu	Glu	Gly	His	Arg	
	50					55						60				
Leu	Ala	Ala	Gly	Ala	Ala	Val	Arg	Gly	Ala	Ala	Ala	Thr	Val	Leu	Leu	
65					70					75					80	
Arg	Leu	Arg	Asp	Asp	Leu	Asn	Val	Thr	Arg	Leu	Ser	His	Phe	Glu	Tyr	
			85						90					95		
Val	Lys	Asn	Glu	Asp	Leu	Glu	Lys	Ile	Gly	Met	Gly	Arg	Pro	Gly	Gln	
			100					105					110			
Arg	Arg	Leu	Trp	Glu	Ala	Val	Lys	Arg	Arg	Lys	Ala	Leu	Cys	Lys	Arg	
		115					120					125				
Lys	Ser	Trp	Met	Asn	Lys	Val	Phe	Ser	Gly	Lys	Arg	Leu	Glu	Ala	Glu	
		130				135					140					
Phe	Pro	Pro	His	His	Ser	Gln	Ser	Thr	Phe	Arg	Lys	Thr	Ser	Pro	Ala	
145					150					155					160	
Pro	Gly	Gly	Pro	Ala	Gly	Glu	Gly	Pro	Leu	Gln	Ser	Leu	Thr	Cys	Leu	
				165					170					175		
Ile	Gly	Glu	Lys	Asp	Leu	Arg	Leu	Leu	Glu	Lys	Leu	Gly	Asp	Gly	Ser	
			180					185					190			
Phe	Gly	Val	Val	Arg	Arg	Gly	Glu	Trp	Asp	Ala	Pro	Ser	Gly	Lys	Thr	
		195					200					205				
Val	Ser	Pro	Pro	Gln	Pro	Ala	Phe	Phe	Thr	Gln	Lys	Pro	Thr	Tyr	Asp	
		210				215					220					
Pro	Val	Ser	Glu	Asp	Gln	Asp	Pro	Leu	Ser	Ser	Asp	Phe	Lys	Arg	Leu	
225					230					235					240	
Gly	Leu	Arg	Lys	Pro	Gly	Leu	Pro	Arg	Gly	Leu	Trp	Leu	Ala	Lys	Pro	
				245					250					255		
Ser	Ala	Arg	Val	Pro	Gly	Thr	Lys	Ala	Ser	Arg	Gly	Ser	Gly	Ala	Glu	
			260					265					270			

Val	Thr	Leu	Ile	Asp	Phe	Gly	Glu	Glu	Pro	Val	Val	Pro	Ala	Leu	Arg	275	280	285
Pro	Cys	Ala	Pro	Ser	Leu	Ala	Gln	Leu	Ala	Met	Asp	Ala	Cys	Ser	Leu	290	295	300
Leu	Asp	Glu	Thr	Pro	Pro	Gln	Ser	Pro	Thr	Arg	Ala	Leu	Pro	Arg	Pro	305	310	315
Leu	His	Pro	Thr	Pro	Val	Val	Asp	Trp	Asp	Ala	Arg	Pro	Leu	Pro	Pro	325	330	335
Pro	Pro	Ala	Tyr	Asp	Asp	Val	Ala	Gln	Asp	Glu	Asp	Asp	Phe	Glu	Ile	340	345	350
Cys	Ser	Ile	Asn	Ser	Thr	Leu	Val	Gly	Ala	Gly	Val	Pro	Ala	Gly	Pro	355	360	365
Ser	Gln	Gly	Gln	Thr	Asn	Tyr	Ala	Phe	Val	Pro	Glu	Gln	Ala	Arg	Pro	370	375	380
Pro	Pro	Pro	Leu	Glu	Asp	Asn	Leu	Phe	Leu	Pro	Pro	Gln	Gly	Gly	Gly	385	390	395
Lys	Pro	Pro	Ser	Ser	Ala	Gln	Thr	Ala	Glu	Ile	Phe	Gln	Ala	Leu	Gln	405	410	415
Gln	Glu	Cys	Met	Arg	Gln	Leu	Gln	Ala	Pro	Ala	Gly	Ser	Pro	Ala	Pro	420	425	430
Ser	Pro	Ser	Pro	Gly	Gly	Asp	Asp	Lys	Pro	Gln	Val	Pro	Pro	Arg	Val	435	440	445
Pro	Ile	Pro	Pro	Arg	Pro	Thr	Arg	Pro	His	Val	Gln	Leu	Ser	Pro	Ala	450	455	460
Pro	Pro	Gly	Glu	Glu	Glu	Thr	Ser	Gln	Trp	Pro	Gly	Pro	Ala	Ser	Pro	465	470	475
Pro	Arg	Val	Pro	Pro	Arg	Glu	Pro	Leu	Ser	Pro	Gln	Gly	Ser	Arg	Thr	485	490	495
Pro	Ser	Pro	Leu	Val	Pro	Pro	Gly	Ser	Ser	Pro	Leu	Pro	Pro	Arg	Leu	500	505	510
Ser	Ser	Ser	Pro	Gly	Lys	Thr	Met	Pro	Thr	Thr	Gln	Ser	Phe	Ala	Ser	515	520	525
Asp	Pro	Lys	Tyr	Ala	Thr	Pro	Gln	Val	Ile	Gln	Ala	Pro	Gly	Pro	Arg	530	535	540
Ala	Gly	Pro	Cys	Ile	Leu	Pro	Ile	Val	Arg	Asp	Gly	Lys	Lys	Val	Ser	545	550	555
Ser	Thr	His	Tyr	Tyr	Leu	Leu	Pro	Glu	Arg	Pro	Ser	Tyr	Leu	Glu	Arg	565	570	575

Tyr Gln Arg Phe Leu Arg Glu Ala Gln Ser Pro Glu Glu Pro Thr Pro
580 585 590

Leu Pro Val Pro Leu Leu Leu Pro Pro Pro Ser Thr Pro Ala Pro Ala
595 600 605

Ala Pro Thr Ala Thr Val Arg Pro Met Pro Gln Ala Ala Leu Asp Pro
610 615 620

Lys Ala Asn Phe Ser Thr Asn Asn Ser Asn Pro Gly Ala Arg Pro Pro
625 630 635 640

Pro Pro Arg Ala Thr Ala Arg Leu Pro Gln Arg Gly Cys Pro Gly Asp
645 650 655

Gly Pro Glu Ala Gly Arg Pro Ala Asp Lys Ile Gln Met Ala Met Val
660 665 670

His Gly Val Thr Thr Glu Glu Cys Gln Ala Ala Leu Gln Cys His Gly
675 680 685

Trp Ser Val Gln Arg Ala Cys Pro Val Ser Glu Gly Gly Ala Ala Leu
690 695 700

Arg Ala Gly Ser Ala Ala Gln Arg Glu Cys His Lys Val Leu Glu Met
705 710 715 720

Phe Asp Trp Asn Leu Glu Gln Ala Gly Cys His Leu Leu Gly Ser Trp
725 730 735

Gly Pro Ala His His Lys Arg
740

<210> 165
<211> 604
<212> PRT
<213> Homo sapiens

<400> 165

Met Ala Ser Asn Pro Glu Arg Gly Glu Ile Leu Leu Thr Glu Leu Gln
1 5 10 15

Gly Asp Ser Arg Ser Leu Pro Phe Ser Glu Asn Val Ser Ala Val Gln
20 25 30

Lys Leu Asp Phe Ser Asp Thr Met Val Gln Gln Lys Leu Asp Asp Ile
35 40 45

Lys Asp Arg Ile Lys Arg Glu Ile Arg Lys Glu Leu Lys Ile Lys Glu
50 55 60

Gly Ala Glu Asn Leu Arg Lys Val Thr Thr Asp Lys Lys Ser Leu Ala
65 70 75 80

Tyr Val Asp Asn Ile Leu Lys Lys Ser Asn Lys Lys Leu Glu Glu Leu

85										90					95				
His	His	Lys	Leu	Gln	Glu	Leu	Asn	Ala	His	His	Ile	Val	Val	Ser	Asp	Pro			
			100					105						110					
Glu	Asp	Ile	Thr	Asp	Cys	Pro	Arg	Thr	Pro	Asp	Thr	Pro	Asn	Asn	Asp				
		115					120					125							
Pro	Arg	Cys	Ser	Thr	Ser	Asn	Asn	Arg	Leu	Lys	Ala	Leu	Gln	Lys	Gln				
	130					135					140								
Leu	Asp	Ile	Glu	Leu	Lys	Val	Lys	Gln	Gly	Ala	Glu	Asn	Met	Ile	Gln				
145					150				155						160				
Met	Tyr	Ser	Asn	Gly	Ser	Ser	Lys	Asp	Arg	Lys	Leu	His	Gly	Thr	Ala				
				165				170						175					
Gln	Gln	Leu	Leu	Gln	Asp	Ser	Lys	Thr	Lys	Ile	Glu	Val	Ile	Arg	Met				
			180					185					190						
Gln	Ile	Leu	Gln	Ala	Val	Gln	Thr	Asn	Glu	Leu	Ala	Phe	Asp	Asn	Ala				
		195					200					205							
Lys	Pro	Val	Ile	Ser	Pro	Leu	Glu	Leu	Arg	Met	Glu	Glu	Leu	Arg	His				
	210					215					220								
His	Phe	Arg	Ile	Glu	Phe	Ala	Val	Ala	Glu	Gly	Ala	Lys	Asn	Val	Met				
225					230				235						240				
Lys	Leu	Leu	Gly	Ser	Gly	Lys	Val	Thr	Asp	Arg	Lys	Ala	Leu	Ser	Glu				
			245					250						255					
Ala	Gln	Ala	Arg	Phe	Asn	Glu	Ser	Ser	Gln	Lys	Leu	Asp	Leu	Leu	Lys				
			260					265					270						
Tyr	Ser	Leu	Glu	Gln	Arg	Leu	Asn	Glu	Val	Pro	Lys	Asn	His	Pro	Lys				
		275					280					285							
Ser	Arg	Ile	Ile	Ile	Glu	Glu	Leu	Ser	Leu	Val	Ala	Ala	Ser	Pro	Thr				
		290					295				300								
Leu	Ser	Pro	Arg	Gln	Ser	Met	Ile	Ser	Thr	Gln	Asn	Gln	Tyr	Ser	Thr				
305					310				315						320				
Leu	Ser	Lys	Pro	Ala	Ala	Leu	Thr	Gly	Thr	Leu	Glu	Val	Arg	Leu	Met				
				325				330						335					
Gly	Cys	Gln	Asp	Ile	Leu	Glu	Asn	Val	Pro	Gly	Arg	Ser	Lys	Ala	Thr				
			340					345					350						
Ser	Val	Ala	Leu	Pro	Gly	Trp	Ser	Pro	Ser	Glu	Thr	Arg	Ser	Ser	Phe				
		355					360					365							
Met	Ser	Arg	Thr	Ser	Lys	Ser	Lys	Ser	Gly	Ser	Ser	Arg	Asn	Leu	Leu				
	370					375					380								
Lys	Thr	Asp	Asp	Leu	Ser	Asn	Asp	Val	Cys	Ala	Val	Leu	Lys	Leu	Asp				

385		390		395		400
Asn Thr Val Val Gly Gln Thr Ser Trp Lys Pro Ile Ser Asn Gln Ser						
	405			410		415
Trp Asp Gln Lys Phe Thr Leu Glu Leu Asp Arg Ser Arg Glu Leu Glu						
	420			425		430
Ile Ser Val Tyr Trp Arg Asp Trp Arg Ser Leu Cys Ala Val Lys Phe						
	435			440		445
Leu Arg Leu Glu Asp Phe Leu Asp Asn Gln Arg His Gly Met Cys Leu						
	450			455		460
Tyr Leu Glu Pro Gln Gly Thr Leu Phe Ala Glu Val Thr Phe Phe Asn						
465		470		475		480
Pro Val Ile Glu Arg Arg Pro Lys Leu Gln Arg Gln Lys Lys Ile Phe						
	485			490		495
Ser Lys Gln Gln Gly Lys Thr Phe Leu Arg Ala Pro Gln Met Asn Ile						
	500			505		510
Asn Ile Ala Thr Trp Gly Arg Leu Val Arg Arg Ala Ile Pro Thr Val						
	515			520		525
Asn His Ser Gly Thr Phe Ser Pro Gln Ala Pro Val Pro Thr Thr Val						
	530			535		540
Pro Val Val Asp Val Arg Ile Pro Gln Leu Ala Pro Pro Ala Arg Tyr						
545		550		555		560
Val Ser Glu Ile Leu Ser Ile Ser Tyr Thr Lys Leu Leu Gly His Ser						
	565			570		575
Tyr Val Leu Ile Ile Ala Gly Val Leu Ser Leu Ala Phe Phe Pro Ser						
	580			585		590
Ser Ile Leu Lys Val Val Phe Cys Leu Leu Lys Lys						
	595			600		

<210> 166
 <211> 613
 <212> PRT
 <213> Homo sapiens

<400> 166

Met Ala Ser Asn Pro Glu Arg Gly Glu Ile Leu Leu Thr Glu Leu Gln						
1		5			10	15
Gly Asp Ser Arg Ser Leu Pro Phe Ser Glu Asn Val Ser Ala Val Gln						
	20			25		30
Lys Leu Asp Phe Ser Asp Thr Met Val Gln Gln Lys Leu Asp Asp Ile						
	35			40		45

Lys	Asp	Arg	Ile	Lys	Arg	Glu	Ile	Arg	Lys	Glu	Leu	Lys	Ile	Lys	Glu	50	55	60
Gly	Ala	Glu	Asn	Leu	Arg	Lys	Val	Thr	Thr	Asp	Lys	Lys	Ser	Leu	Ala	65	70	75
Tyr	Val	Asp	Asn	Ile	Leu	Lys	Lys	Ser	Asn	Lys	Lys	Leu	Glu	Glu	Leu	85	90	95
His	His	Lys	Leu	Gln	Glu	Leu	Asn	Ala	His	Ile	Val	Val	Ser	Asp	Pro	100	105	110
Glu	Asp	Ile	Thr	Asp	Cys	Pro	Arg	Thr	Pro	Asp	Thr	Pro	Asn	Asn	Asp	115	120	125
Pro	Arg	Cys	Ser	Thr	Ser	Asn	Asn	Arg	Leu	Lys	Ala	Leu	Gln	Lys	Gln	130	135	140
Leu	Asp	Ile	Glu	Leu	Lys	Val	Lys	Gln	Gly	Ala	Glu	Asn	Met	Ile	Gln	145	150	155
Met	Tyr	Ser	Asn	Gly	Ser	Ser	Lys	Asp	Arg	Lys	Leu	His	Gly	Thr	Ala	165	170	175
Gln	Gln	Leu	Leu	Gln	Asp	Ser	Lys	Thr	Lys	Ile	Glu	Val	Ile	Arg	Met	180	185	190
Gln	Ile	Leu	Gln	Ala	Val	Gln	Thr	Asn	Glu	Leu	Ala	Phe	Asp	Asn	Ala	195	200	205
Lys	Pro	Val	Ile	Ser	Pro	Leu	Glu	Leu	Arg	Met	Glu	Glu	Leu	Arg	His	210	215	220
His	Phe	Arg	Ile	Glu	Phe	Ala	Val	Ala	Glu	Gly	Ala	Lys	Asn	Val	Met	225	230	235
Lys	Leu	Leu	Gly	Ser	Gly	Lys	Val	Thr	Asp	Arg	Lys	Ala	Leu	Ser	Glu	245	250	255
Ala	Gln	Ala	Arg	Phe	Asn	Glu	Ser	Ser	Gln	Lys	Leu	Asp	Leu	Leu	Lys	260	265	270
Tyr	Ser	Leu	Glu	Gln	Arg	Leu	Asn	Glu	Val	Pro	Lys	Asn	His	Pro	Lys	275	280	285
Ser	Arg	Ile	Ile	Ile	Glu	Glu	Leu	Ser	Leu	Val	Ala	Ala	Ser	Pro	Thr	290	295	300
Leu	Ser	Pro	Arg	Gln	Ser	Met	Ile	Ser	Thr	Gln	Asn	Gln	Tyr	Ser	Thr	305	310	315
Leu	Ser	Lys	Pro	Ala	Ala	Leu	Thr	Gly	Thr	Leu	Glu	Val	Arg	Leu	Met	325	330	335
Gly	Cys	Gln	Asp	Ile	Leu	Glu	Asn	Val	Pro	Gly	Arg	Ser	Lys	Ala	Thr	340	345	350

Ser Val Ala Leu Pro Gly Trp Ser Pro Ser Glu Thr Arg Ser Ser Phe
355 360 365

Met Ser Arg Thr Ser Lys Ser Lys Ser Gly Ser Ser Arg Asn Leu Leu
370 375 380

Lys Thr Asp Asp Leu Ser Asn Asp Val Cys Ala Val Leu Lys Leu Asp
385 390 395 400

Asn Thr Val Val Gly Gln Thr Ser Trp Lys Pro Ile Ser Asn Gln Ser
405 410 415

Trp Asp Gln Lys Phe Thr Leu Glu Leu Asp Arg Ser Arg Glu Leu Glu
420 425 430

Ile Ser Val Tyr Trp Arg Asp Trp Arg Ser Leu Cys Ala Val Lys Phe
435 440 445

Leu Arg Leu Glu Asp Phe Leu Asp Asn Gln Arg His Gly Met Cys Leu
450 455 460

Tyr Leu Glu Pro Gln Gly Thr Leu Phe Ala Glu Val Thr Phe Phe Asn
465 470 475 480

Pro Val Ile Glu Arg Arg Pro Lys Leu Gln Arg Gln Lys Lys Ile Phe
485 490 495

Ser Lys Gln Gln Gly Lys Thr Phe Leu Arg Ala Pro Gln Met Asn Ile
500 505 510

Asn Ile Ala Thr Trp Gly Arg Leu Val Arg Arg Ala Ile Pro Thr Val
515 520 525

Asn His Ser Gly Thr Phe Ser Pro Gln Ala Pro Val Pro Thr Thr Val
530 535 540

Pro Val Val Asp Val Arg Ile Pro Gln Leu Ala Pro Pro Ala Ser Asp
545 550 555 560

Ser Thr Val Thr Lys Leu Asp Phe Asp Leu Glu Pro Glu Pro Pro Pro
565 570 575

Ala Pro Pro Arg Ala Ser Ser Leu Gly Glu Ile Asp Glu Ser Ser Glu
580 585 590

Leu Arg Val Leu Asp Ile Pro Gly Gln Ala Ser His Phe Lys Pro Cys
595 600 605

Ile Ile Pro Leu His
610

<210> 167

<211> 133

<212> PRT

<213> Homo sapiens

<400> 167

Met Val Ser Ser Gln Lys Leu Glu Lys Pro Ile Glu Met Gly Ser Ser
 1 5 10 15
 Glu Pro Leu Pro Ile Ala Asp Gly Asp Arg Arg Arg Lys Lys Lys Arg
 20 25 30
 Arg Gly Arg Ala Thr Asp Ser Leu Pro Gly Lys Phe Glu Asp Met Tyr
 35 40 45
 Lys Leu Thr Ser Glu Leu Leu Gly Glu Gly Ala Tyr Ala Lys Val Gln
 50 55 60
 Gly Ala Val Ser Leu Gln Asn Gly Lys Glu Tyr Ala Val Lys Ile Ile
 65 70 75 80
 Glu Lys Gln Ala Gly His Ser Arg Ser Arg Val Phe Arg Glu Val Glu
 85 90 95
 Thr Leu Tyr Gln Cys Gln Gly Asn Lys Asn Ile Leu Glu Leu Ile Glu
 100 105 110
 Phe Phe Glu Asp Asp Thr Arg Phe Tyr Leu Val Phe Glu Lys Leu Gln
 115 120 125
 Gly Gly Thr Tyr Arg
 130

<210> 168
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 168

Met Leu Gln Val Gly Val Leu Arg Asp Arg Ser Pro Ala Gly Ala Ser
 1 5 10 15
 Glu Gly Phe His Val Arg Gly Arg Trp Arg Thr Glu Asp Cys His Leu
 20 25 30
 Arg Thr Lys Ala Ile Glu Thr Leu Arg Val Ala Gly Arg His Gln Leu
 35 40 45
 Pro Asp Arg Ser Phe Ile Ser Phe Gly Ile Ser Ser Leu Gln Met Val
 50 55 60
 Ser Ser Gln Lys Leu Glu Lys Pro Ile Glu Met Gly Ser Ser Glu Pro
 65 70 75 80
 Leu Pro Ile Ala Asp Gly Asp Arg Arg Arg Lys Lys Lys Arg Arg Gly
 85 90 95
 Arg Ala Thr Asp Ser Leu Pro Gly Lys Phe Glu Asp Met Tyr Lys Leu
 100 105 110
 Thr Ser Glu Leu Leu Gly Glu Gly Ala Tyr Ala Lys Val Gln Gly Ala

115	120	125
Val Ser Leu Gln Asn Gly Lys Glu Tyr Ala Val Lys Val Ser Val Ser		
130	135	140
Ala Glu Cys Gln Ala Leu Leu Cys Lys		
145	150	
<210> 169		
<211> 231		
<212> PRT		
<213> Homo sapiens		
<400> 169		
Met Gly Ser Gly Met Lys Leu Asn Asn Ser Cys Thr Pro Ile Thr Thr		
1	5	10
Pro Glu Leu Thr Thr Pro Cys Gly Ser Ala Glu Tyr Met Ala Pro Glu		
	20	25
Val Val Glu Val Phe Thr Asp Gln Ala Thr Phe Tyr Asp Lys Arg Cys		
	35	40
Asp Leu Trp Ser Leu Gly Val Val Leu Tyr Ile Met Leu Ser Gly Tyr		
	50	55
Pro Pro Phe Val Gly His Cys Gly Ala Asp Cys Gly Trp Asp Arg Gly		
65	70	75
Glu Val Cys Arg Val Cys Gln Asn Lys Leu Phe Glu Ser Ile Gln Glu		
	85	90
Gly Lys Tyr Glu Phe Pro Asp Lys Asp Trp Ala His Ile Ser Ser Glu		
	100	105
Ala Lys Asp Leu Ile Ser Lys Leu Leu Val Arg Asp Ala Lys Gln Arg		
	115	120
Leu Ser Ala Ala Gln Val Leu Gln His Pro Trp Val Gln Gly Gln Ala		
	130	135
Pro Glu Lys Gly Leu Pro Thr Pro Gln Val Leu Gln Arg Asn Ser Ser		
145	150	155
Thr Met Asp Leu Thr Leu Phe Ala Ala Glu Ala Ile Ala Leu Asn Arg		
	165	170
Gln Leu Ser Gln His Glu Glu Asn Glu Leu Ala Glu Glu Pro Glu Ala		
	180	185
Leu Ala Asp Gly Leu Cys Ser Met Lys Leu Ser Pro Pro Cys Lys Ser		
	195	200
Arg Leu Ala Arg Arg Arg Ala Leu Ala Gln Ala Gly Arg Gly Glu Asp		
	210	215
		220

Arg Ser Pro Pro Thr Ala Leu
225 230

<210> 170
<211> 146
<212> PRT
<213> Homo sapiens

<400> 170

Met Arg Lys Gly Val Leu Lys Asp Pro Glu Ile Ala Asp Leu Phe Tyr
1 5 10 15

Lys Asp Asp Pro Glu Glu Leu Phe Ile Gly Leu His Glu Ile Gly His
20 25 30

Gly Ser Phe Gly Ala Val Tyr Phe Ala Thr Asn Ala His Thr Ser Glu
35 40 45

Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu
50 55 60

Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
65 70 75 80

His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr
85 90 95

Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala Ser Asp Leu Leu
100 105 110

Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr
115 120 125

His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile
130 135 140

His Arg
145

<210> 171
<211> 123
<212> PRT
<213> Homo sapiens

<400> 171

Met Met Glu Glu Leu His Ser Leu Asp Pro Arg Arg Gln Glu Leu Leu
1 5 10 15

Glu Ala Arg Phe Thr Gly Val Gly Val Ser Lys Gly Pro Leu Asn Ser
20 25 30

Glu Ser Ser Asn Gln Ser Leu Cys Ser Val Gly Ser Leu Ser Asp Lys
35 40 45

Glu Val Glu Thr Pro Glu Lys Lys Gln Asn Asp Gln Arg Asn Arg Lys

50	55	60
Arg Lys Ala Glu Pro Tyr Glu Thr Ser Gln Gly Lys Gly Thr Pro Arg		
65	70	75 80
Gly His Lys Ile Ser Asp Tyr Phe Glu Thr Ala Pro Leu Trp Phe Arg		
	85	90 95
Trp Gln Cys Cys Lys Gly Gly Asn Arg Gly Ala Val Cys Ser Ala Asn		
	100	105 110
Pro His Val Ser Asp Ala Ser Lys Thr Ser Ala		
	115	120
<210> 172		
<211> 478		
<212> PRT		
<213> Homo sapiens		
<400> 172		
Met Val Gly Ile Lys Glu Arg Pro Ser Ser Asn Leu Pro Cys Pro Pro		
1	5	10 15
Leu Pro Pro Gln Thr Gln Ala Cys Pro Pro Leu Ser Trp Pro Gln Arg		
	20	25 30
Leu Asp Ile Leu Leu Gly Thr Ala Arg Ala Ile Gln Phe Leu His Gln		
	35	40 45
Asp Ser Pro Ser Leu Ile His Gly Asp Ile Lys Ser Ser Asn Val Leu		
	50	55 60
Leu Asp Glu Arg Leu Thr Pro Lys Leu Gly Asp Phe Gly Leu Ala Arg		
65	70	75 80
Phe Ser Arg Phe Ala Gly Ser Ser Pro Ser Gln Ser Ser Met Val Ala		
	85	90 95
Arg Thr Gln Thr Val Arg Gly Thr Leu Ala Tyr Leu Pro Glu Glu Tyr		
	100	105 110
Ile Lys Thr Gly Arg Leu Ala Val Asp Thr Asp Thr Phe Ser Phe Gly		
	115	120 125
Val Val Val Leu Glu Thr Leu Ala Gly Gln Arg Ala Val Lys Thr His		
	130	135 140
Gly Ala Arg Thr Lys Tyr Leu Lys Asp Leu Val Glu Glu Glu Ala Glu		
145	150	155 160
Glu Ala Gly Val Ala Leu Arg Ser Thr Gln Ser Thr Leu Gln Ala Gly		
	165	170 175
Leu Ala Ala Asp Ala Trp Ala Ala Pro Ile Ala Met Gln Ile Tyr Lys		
	180	185 190

Lys His Leu Asp Pro Arg Pro Gly Pro Cys His Leu Ser Trp Ala Trp
 195 200 205
 Ala Trp Ala Ser Trp Pro Ala Ala Ala Cys Thr Ala Gly Pro Lys Gly
 210 215 220
 Arg Pro Pro Met Thr Gln Val Tyr Glu Arg Leu Glu Lys Leu Gln Ala
 225 230 235 240
 Val Val Ala Gly Val Pro Gly His Leu Glu Ala Ala Ser Cys Ile Pro
 245 250 255
 Phe Pro Gln Glu Asn Ser Tyr Val Ser Ser Thr Gly Arg Ala His Ser
 260 265 270
 Gly Ala Ala Pro Trp Gln Pro Leu Ala Ala Pro Ser Gly Ala Ser Ala
 275 280 285
 Gln Ala Ala Glu Gln Leu Gln Arg Gly Pro Asn Gln Pro Val Glu Ser
 290 295 300
 Asp Glu Ser Leu Gly Gly Leu Ser Ala Ala Leu Arg Ser Trp His Leu
 305 310 315 320
 Thr Pro Ser Cys Pro Leu Asp Pro Ala Pro Leu Arg Glu Ala Gly Cys
 325 330 335
 Pro Gln Gly Asp Thr Ala Gly Glu Ser Ser Trp Gly Ser Gly Pro Gly
 340 345 350
 Ser Arg Pro Thr Ala Val Glu Gly Leu Ala Leu Gly Ser Ser Ala Ser
 355 360 365
 Ser Ser Ser Glu Pro Pro Gln Ile Ile Ile Asn Pro Ala Arg Gln Lys
 370 375 380
 Met Val Gln Lys Leu Ala Leu Tyr Glu Asp Gly Ala Leu Asp Ser Leu
 385 390 395 400
 Gln Leu Leu Ser Ser Ser Ser Leu Pro Gly Leu Gly Leu Glu Gln Asp
 405 410 415
 Arg Gln Gly Pro Lys Lys Val Met Asn Phe Arg Ala Asp Val Phe Thr
 420 425 430
 Trp Ala Asp Pro Pro Asn Pro Glu Val Lys Val Leu Met Val Arg Ser
 435 440 445
 Ser His Gly Ala Arg Val Leu Ser Thr Leu Pro Ala Val Gly Val Gly
 450 455 460
 Ala His Ala Arg Trp Gly Glu Lys Glu Val Ala Leu Leu Phe
 465 470 475

<210> 173
 <211> 344
 <212> PRT

<213> Homo sapiens

<400> 173

Met	Ala	Gly	Gly	Pro	Gly	Pro	Gly	Glu	Pro	Ala	Ala	Pro	Gly	Ala	Gln	
1				5					10					15		
His	Phe	Leu	Tyr	Glu	Val	Pro	Pro	Trp	Val	Met	Cys	Arg	Phe	Tyr	Lys	
			20					25					30			
Val	Met	Asp	Ala	Leu	Glu	Pro	Ala	Asp	Trp	Cys	Gln	Phe	Ala	Ala	Leu	
		35					40					45				
Ile	Val	Arg	Asp	Gln	Thr	Glu	Leu	Arg	Leu	Cys	Glu	Arg	Ser	Gly	Gln	
	50					55					60					
Arg	Thr	Ala	Ser	Val	Leu	Trp	Pro	Trp	Ile	Asn	Arg	Asn	Ala	Arg	Val	
65					70					75					80	
Ala	Asp	Leu	Val	His	Ile	Leu	Thr	His	Leu	Gln	Leu	Leu	Arg	Ala	Arg	
				85					90					95		
Asp	Ile	Ile	Thr	Ala	Trp	His	Pro	Pro	Ala	Pro	Leu	Pro	Ser	Pro	Gly	
			100					105					110			
Thr	Thr	Ala	Pro	Arg	Pro	Ser	Ser	Ile	Pro	Ala	Pro	Ala	Glu	Ala	Glu	
		115					120					125				
Ala	Trp	Ser	Pro	Arg	Lys	Leu	Pro	Ser	Ser	Ala	Ser	Thr	Phe	Leu	Ser	
	130					135					140					
Pro	Ala	Phe	Pro	Gly	Ser	Gln	Thr	His	Ser	Gly	Pro	Glu	Leu	Gly	Leu	
145					150					155					160	
Val	Pro	Ser	Pro	Ala	Ser	Leu	Trp	Pro	Pro	Pro	Pro	Ser	Pro	Ala	Pro	
				165					170					175		
Ser	Ser	Thr	Lys	Pro	Gly	Pro	Glu	Ser	Ser	Val	Ser	Leu	Leu	Gln	Gly	
			180					185					190			
Ala	Arg	Pro	Ser	Pro	Phe	Cys	Trp	Pro	Leu	Cys	Glu	Ile	Ser	Arg	Gly	
		195					200					205				
Thr	His	Asn	Phe	Ser	Glu	Glu	Leu	Lys	Ile	Gly	Glu	Gly	Gly	Phe	Gly	
	210					215					220					
Cys	Val	Tyr	Arg	Ala	Val	Met	Arg	Asn	Thr	Val	Tyr	Ala	Val	Lys	Arg	
225					230					235					240	
Leu	Lys	Glu	Asn	Ala	Asp	Leu	Glu	Trp	Thr	Ala	Val	Lys	Gln	Ser	Phe	
				245					250					255		
Leu	Thr	Glu	Val	Glu	Gln	Leu	Ser	Arg	Phe	Arg	His	Pro	Asn	Ile	Val	
			260					265					270			
Asp	Phe	Ala	Gly	Tyr	Cys	Ala	Gln	Asn	Gly	Phe	Tyr	Cys	Leu	Val	Tyr	
		275					280					285				

Gly Phe Leu Pro Asn Gly Ser Leu Glu Asp Arg Leu His Cys Gln Thr
290 295 300

Gln Ala Cys Pro Pro Leu Ser Trp Pro Gln Arg Leu Asp Ile Leu Leu
305 310 315 320

Gly Thr Ala Arg Ala Ser Gln Val Ser Cys Asn Arg Val Ser Ser Cys
325 330 335

Val Ser Lys Ser Ser Pro Gly Leu
340

<210> 174
<211> 336
<212> PRT
<213> Homo sapiens

<400> 174

Met Phe Thr Glu Glu Asp Val Lys Phe Tyr Leu Ala Glu Leu Ala Leu
1 5 10 15

Ala Leu Asp His Leu His Ser Leu Gly Ile Ile Tyr Arg Asp Leu Lys
20 25 30

Pro Glu Asn Ile Leu Leu Asp Glu Glu Gly His Ile Lys Leu Thr Asp
35 40 45

Phe Gly Leu Ser Lys Glu Ser Ile Asp His Glu Lys Lys Ala Tyr Ser
50 55 60

Phe Cys Gly Thr Val Glu Tyr Met Ala Pro Glu Val Val Asn Arg Arg
65 70 75 80

Gly His Thr Gln Ser Ala Asp Trp Trp Ser Phe Gly Val Leu Met Phe
85 90 95

Glu Met Leu Thr Gly Thr Leu Pro Phe Gln Gly Lys Asp Arg Lys Glu
100 105 110

Thr Met Thr Met Ile Leu Lys Ala Lys Leu Gly Met Pro Gln Phe Leu
115 120 125

Ser Pro Glu Ala Gln Ser Leu Leu Arg Met Leu Phe Lys Arg Asn Pro
130 135 140

Ala Asn Arg Leu Gly Ala Gly Pro Asp Gly Val Glu Glu Ile Lys Arg
145 150 155 160

His Ser Phe Phe Ser Thr Ile Asp Trp Asn Lys Leu Tyr Arg Arg Glu
165 170 175

Ile His Pro Pro Phe Lys Pro Ala Thr Gly Arg Pro Glu Asp Thr Phe
180 185 190

Tyr Phe Asp Pro Glu Phe Thr Ala Lys Thr Pro Lys Asp Ser Pro Gly

195					200					205						
Ile	Pro	Pro	Ser	Ala	Asn	Ala	His	Gln	Leu	Phe	Arg	Gly	Phe	Ser	Phe	
210					215					220						
Val	Ala	Ile	Thr	Ser	Asp	Asp	Glu	Ser	Gln	Ala	Met	Gln	Thr	Val	Gly	
225					230					235					240	
Val	His	Ser	Ile	Val	Gln	Gln	Leu	His	Arg	Asn	Ser	Ile	Gln	Phe	Thr	
245					250					255						
Asp	Gly	Tyr	Glu	Val	Lys	Glu	Asp	Ile	Gly	Val	Gly	Ser	Tyr	Ser	Val	
260					265					270						
Cys	Lys	Arg	Cys	Ile	His	Lys	Ala	Thr	Asn	Met	Glu	Phe	Ala	Val	Lys	
275					280					285						
Val	Asn	Phe	Phe	Tyr	Leu	Lys	Cys	Asn	Ser	Tyr	Ser	Ser	Cys	Ser	Cys	
290					295					300						
Met	Ser	Val	Pro	Val	Lys	Asn	Tyr	Thr	Pro	Leu	Val	Val	Lys	Ser	Ala	
305					310					315					320	
Phe	Cys	Tyr	Lys	Lys	Val	Lys	Tyr	Leu	Ala	Ser	Asp	Leu	Gln	Arg	Ser	
325					330					335						

<210> 175
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 175

Met	Pro	Leu	Ala	Gln	Leu	Ala	Asp	Pro	Trp	Gln	Lys	Met	Ala	Val	Glu
1				5					10					15	
Ser	Pro	Ser	Asp	Ser	Ala	Glu	Asn	Gly	Gln	Gln	Ile	Met	Asp	Glu	Pro
			20					25					30		
Met	Gly	Glu	Glu	Glu	Ile	Asn	Pro	Gln	Thr	Glu	Glu	Val	Ser	Ile	Lys
		35					40					45			
Glu	Ile	Ala	Ile	Thr	His	His	Val	Lys	Glu	Gly	His	Glu	Lys	Ala	Asp
		50				55					60				
Pro	Ser	Gln	Phe	Glu	Leu	Leu	Lys	Val	Leu	Gly	Gln	Gly	Ser	Phe	Gly
65					70						75				80
Lys	Val	Phe	Leu	Val	Lys	Lys	Ile	Ser	Gly	Ser	Asp	Ala	Arg	Gln	Leu
			85						90					95	
Tyr	Ala	Met	Lys	Val	Leu	Lys	Lys	Ala	Thr	Leu	Lys	Val	Arg	Asp	Arg
			100					105					110		
Val	Arg	Thr	Lys	Met	Glu	Arg	Asp	Ile	Leu	Val	Glu	Val	Asn	His	Pro
			115				120					125			

Phe Ile Val Lys Leu His Tyr Ala Phe Gln Thr Glu Gly Lys Leu Tyr
130 135 140

Leu Ile Leu Asp Phe Leu Arg Gly Gly Asp Leu Phe Thr Arg Leu Ser
145 150 155 160

Lys Glu Val Met Phe Thr Glu Glu Asp Val Lys Phe Tyr Leu Ala Glu
165 170 175

Leu Ala Leu Ala Leu Asp His Leu His Ser Leu Gly Ile Ile Tyr Arg
180 185 190

Asp Leu Lys Pro Glu Lys
195

<210> 176

<211> 489

<212> PRT

<213> Homo sapiens

<400> 176

Met Ser Thr Glu Ala Asp Glu Gly Ile Thr Phe Ser Val Pro Pro Phe
1 5 10 15

Ala Pro Ser Gly Phe Cys Thr Ile Pro Glu Gly Gly Ile Cys Arg Arg
20 25 30

Gly Gly Ala Ala Ala Val Gly Glu Gly Glu Glu His Gln Leu Pro Pro
35 40 45

Pro Pro Pro Gly Ser Phe Trp Asn Val Glu Ser Ala Ala Ala Pro Gly
50 55 60

Ile Gly Cys Pro Ala Ala Thr Ser Ser Ser Ser Ala Thr Arg Gly Arg
65 70 75 80

Gly Ser Ser Val Gly Gly Gly Ser Arg Arg Thr Thr Val Ala Tyr Val
85 90 95

Ile Asn Glu Ala Ser Gln Gly Gln Leu Val Val Ala Glu Ser Glu Ala
100 105 110

Leu Gln Ser Leu Arg Glu Ala Cys Glu Thr Val Gly Ala Thr Leu Glu
115 120 125

Thr Leu His Phe Gly Lys Leu Asp Phe Gly Glu Thr Thr Val Leu Asp
130 135 140

Arg Phe Tyr Asn Ala Asp Ile Ala Val Val Glu Met Ser Asp Ala Phe
145 150 155 160

Arg Gln Pro Ser Leu Phe Tyr His Leu Gly Val Arg Glu Ser Phe Ser
165 170 175

Met Ala Asn Asn Ile Ile Leu Tyr Cys Asp Thr Asn Ser Asp Ser Leu
180 185 190

Gln	Ser	Leu	Lys	Glu	Ile	Ile	Cys	Gln	Lys	Asn	Thr	Met	Cys	Thr	Gly
		195				200						205			
Asn	Tyr	Thr	Phe	Val	Pro	Tyr	Met	Ile	Thr	Pro	His	Asn	Lys	Val	Tyr
		210				215				220					
Cys	Cys	Asp	Ser	Ser	Phe	Met	Lys	Gly	Leu	Thr	Glu	Leu	Met	Gln	Pro
225						230				235				240	
Asn	Phe	Glu	Leu	Leu	Leu	Gly	Pro	Ile	Cys	Leu	Pro	Leu	Val	Asp	Arg
				245				250						255	
Phe	Ile	Gln	Leu	Leu	Lys	Val	Ala	Gln	Ala	Ser	Ser	Ser	Gln	Tyr	Phe
		260						265				270			
Arg	Glu	Ser	Ile	Leu	Asn	Asp	Ile	Arg	Lys	Ala	Arg	Asn	Leu	Tyr	Thr
		275				280						285			
Gly	Lys	Glu	Leu	Ala	Ala	Glu	Leu	Ala	Arg	Ile	Arg	Gln	Arg	Val	Asp
290						295				300					
Asn	Ile	Glu	Val	Leu	Thr	Ala	Asp	Ile	Val	Ile	Asn	Leu	Leu	Leu	Ser
305						310				315				320	
Tyr	Arg	Asp	Ile	Gln	Asp	Tyr	Asp	Ser	Ile	Val	Lys	Leu	Val	Glu	Thr
				325				330						335	
Leu	Glu	Lys	Leu	Pro	Thr	Phe	Asp	Leu	Ala	Ser	His	His	His	Val	Lys
		340						345				350			
Phe	His	Tyr	Ala	Phe	Ala	Leu	Asn	Arg	Arg	Asn	Leu	Pro	Gly	Asp	Arg
		355				360						365			
Ala	Lys	Ala	Leu	Asp	Ile	Met	Ile	Pro	Met	Val	Gln	Ser	Glu	Gly	Gln
370						375				380					
Val	Ala	Ser	Asp	Met	Tyr	Cys	Leu	Val	Gly	Arg	Ile	Tyr	Lys	Asp	Met
385				390						395				400	
Phe	Leu	Asp	Ser	Asn	Phe	Thr	Asp	Thr	Glu	Ser	Arg	Asp	His	Gly	Ala
				405				410						415	
Ser	Trp	Phe	Lys	Lys	Ala	Phe	Glu	Ser	Glu	Pro	Thr	Leu	Gln	Ser	Gly
		420				425						430			
Ile	Asn	Tyr	Ala	Val	Leu	Leu	Leu	Ala	Ala	Gly	His	Gln	Phe	Glu	Ser
		435				440				445					
Ser	Phe	Glu	Leu	Arg	Lys	Val	Gly	Asn	Tyr	Asn	Leu	Asn	Phe	Tyr	Met
450						455				460					
Glu	Ile	Lys	Lys	Leu	Gly	Pro	Asn	Leu	Val	Gln	Arg	Arg	Ile	Ser	Ala
465				470						475				480	
Asp	Ser	Asp	Gly	Ser	Pro	Gly	Phe	Val							
				485											

<210> 177
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 177

Met	Arg	Glu	Phe	Glu	Val	Leu	Lys	Lys	Leu	Asn	His	Lys	Asn	Ile	Val
1				5					10					15	
Lys	Leu	Phe	Ala	Ile	Glu	Glu	Glu	Thr	Thr	Thr	Arg	His	Lys	Val	Leu
			20					25					30		
Ile	Met	Glu	Phe	Cys	Pro	Cys	Gly	Ser	Leu	Tyr	Thr	Val	Leu	Glu	Glu
		35					40					45			
Pro	Ser	Asn	Ala	Tyr	Gly	Leu	Pro	Glu	Ser	Glu	Phe	Leu	Ile	Val	Leu
	50					55					60				
Arg	Asp	Val	Val	Gly	Gly	Met	Asn	His	Leu	Arg	Glu	Asn	Gly	Ile	Val
65					70					75				80	
His	Arg	Asp	Ile	Lys	Pro	Gly	Asn	Ile	Met	Arg	Ala	Leu	Tyr	His	Ser
			85						90					95	
Leu	Val	Asp	Asp	Ser	Phe	His	Pro	Pro							
			100					105							

<210> 178
 <211> 413
 <212> PRT
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(413)
 <223> "XAA" can be any amino acid

<400> 178

Met	Tyr	Cys	Phe	Gly	Arg	Lys	Xaa	Tyr	Ile	Ser	Thr	Arg	Pro	Cys	Phe
1				5					10					15	
Pro	Asn	Lys	Thr	Cys	Gln	Lys	Met	Leu	Ile	Ile	Leu	Thr	Ser	Ala	Leu
			20					25					30		
Gln	Ile	Ala	His	Arg	Cys	Ile	Cys	Arg	Ile	Leu	Leu	Gly	Ser	Arg	Val
		35					40					45			
Leu	Ala	Ala	Lys	Ala	Ser	Gly	Asn	Cys	Thr	Leu	Asn	Ser	Glu	Asp	Phe
	50					55					60				
Ile	Phe	Asn	Ile	Gly	Ser	Ala	Ala	Tyr	Asp	Ala	Val	Leu	Asp	Arg	Asn
65					70				75					80	

Val	Ala	Ile	Lys	Lys	Leu	Ser	Arg	Pro	Phe	Gln	Asn	Gln	Thr	His	Ala	
				85					90					95		
Lys	Arg	Ala	Tyr	Arg	Glu	Leu	Val	Leu	Met	Lys	Cys	Val	Asn	His	Lys	
			100					105					110			
Asn	Ile	Ile	Ser	Leu	Leu	Asn	Val	Phe	Thr	Pro	Gln	Lys	Thr	Leu	Glu	
		115					120					125				
Glu	Phe	Gln	Asp	Val	Tyr	Leu	Val	Met	Glu	Leu	Met	Asp	Ala	Asn	Leu	
	130					135					140					
Cys	Gln	Val	Ile	Gln	Met	Glu	Leu	Asp	His	Glu	Arg	Met	Ser	Tyr	Leu	
145					150					155					160	
Leu	Tyr	Gln	Met	Leu	Cys	Gly	Ile	Lys	His	Leu	His	Ser	Ala	Gly	Ile	
			165						170					175		
Ile	His	Arg	Asp	Leu	Lys	Pro	Ser	Asn	Ile	Val	Val	Lys	Ser	Asp	Cys	
			180					185					190			
Thr	Leu	Lys	Ile	Leu	Asp	Phe	Gly	Leu	Ala	Arg	Thr	Ala	Gly	Thr	Ser	
		195					200					205				
Phe	Met	Met	Thr	Pro	Tyr	Val	Val	Thr	Arg	Tyr	Tyr	Arg	Ala	Pro	Glu	
	210					215					220					
Val	Ile	Leu	Gly	Met	Gly	Tyr	Lys	Glu	Asn	Val	Asp	Ile	Trp	Ser	Val	
225					230					235					240	
Gly	Cys	Ile	Met	Gly	Glu	Met	Val	Arg	His	Lys	Ile	Leu	Phe	Pro	Gly	
			245						250					255		
Arg	Asp	Tyr	Ile	Asp	Gln	Trp	Asn	Lys	Val	Ile	Glu	Gln	Leu	Gly	Thr	
		260						265					270			
Pro	Cys	Pro	Glu	Phe	Met	Lys	Lys	Leu	Gln	Pro	Thr	Val	Arg	Asn	Tyr	
		275					280					285				
Val	Glu	Asn	Arg	Pro	Lys	Tyr	Ala	Gly	Leu	Thr	Phe	Pro	Lys	Leu	Phe	
	290					295					300					
Pro	Asp	Ser	Leu	Phe	Pro	Ala	Asp	Ser	Glu	His	Asn	Lys	Leu	Lys	Ala	
305					310					315					320	
Ser	Gln	Ala	Arg	Asp	Leu	Leu	Ser	Lys	Met	Leu	Val	Ile	Asp	Pro	Ala	
			325						330					335		
Lys	Arg	Ile	Ser	Val	Asp	Asp	Ala	Leu	Gln	His	Pro	Tyr	Ile	Asn	Val	
		340						345					350			
Trp	Tyr	Asp	Pro	Ala	Glu	Val	Glu	Ala	Pro	Pro	Pro	Gln	Ile	Tyr	Asp	
		355					360					365				
Lys	Gln	Leu	Asp	Glu	Arg	Glu	His	Thr	Ile	Glu	Glu	Trp	Lys	Glu	Leu	
	370					375					380					

Ile Tyr Lys Glu Val Met Asn Ser Glu Glu Lys Thr Lys Asn Gly Val
 385 390 395 400

Val Lys Gly Gln Pro Ser Pro Ser Ala Gln Val Gln Gln
 405 410

<210> 179
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 179

Met Ser Lys Ser Lys Val Asp Asn Gln Phe Tyr Ser Val Glu Val Gly
 1 5 10 15

Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr Gln Asn Leu Lys Pro Ile
 20 25 30

Gly Ser Gly Ala Gln Gly Ile Val Cys Ala Ala Tyr Asp Ala Val Leu
 35 40 45

Asp Arg Asn Val Ala Ile Lys Lys Leu Ser Arg Pro Phe Gln Asn Gln
 50 55 60

Thr His Ala Lys Arg Ala Tyr Arg Glu Leu Val Leu Met Lys Cys Val
 65 70 75 80

Asn His Lys Asn Val Ser Phe Val Ile Phe Lys Leu Leu Ala Val Gly
 85 90 95

Val Cys Lys Ile Gly Lys Arg Lys Cys Val Cys Thr
 100 105

<210> 180
 <211> 336
 <212> PRT
 <213> Homo sapiens

<400> 180

Met Ala Met Thr Gly Ser Thr Pro Cys Ser Ser Met Ser Asn His Thr
 1 5 10 15

Lys Glu Arg Val Thr Met Thr Lys Val Thr Leu Glu Asn Phe Tyr Ser
 20 25 30

Asn Leu Ile Ala Gln His Glu Glu Arg Glu Met Arg Gln Lys Lys Leu
 35 40 45

Glu Lys Val Met Glu Glu Glu Gly Leu Lys Asp Glu Glu Lys Arg Leu
 50 55 60

Arg Arg Ser Ala His Ala Arg Lys Glu Thr Glu Phe Leu Arg Leu Lys
 65 70 75 80

Arg Thr Arg Leu Gly Leu Glu Asp Phe Glu Ser Leu Lys Val Ile Gly

85					90					95						
Arg	Gly	Ala	Phe	Gly	Glu	Val	Arg	Leu	Val	Gln	Lys	Lys	Asp	Thr	Gly	
100					105					110						
His	Val	Tyr	Ala	Met	Lys	Ile	Leu	Arg	Lys	Ala	Asp	Met	Leu	Glu	Lys	
115					120					125						
Glu	Gln	Val	Gly	His	Ile	Arg	Ala	Glu	Arg	Asp	Ile	Leu	Val	Glu	Ala	
130					135					140						
Asp	Ser	Leu	Trp	Val	Val	Lys	Met	Phe	Tyr	Ser	Phe	Gln	Asp	Lys	Leu	
145					150					155					160	
Asn	Leu	Tyr	Leu	Ile	Met	Glu	Phe	Leu	Pro	Gly	Gly	Asp	Met	Met	Thr	
165					170					175						
Leu	Leu	Met	Lys	Lys	Asp	Thr	Leu	Thr	Glu	Glu	Glu	Thr	Gln	Phe	Tyr	
180					185					190						
Ile	Ala	Glu	Thr	Val	Leu	Ala	Ile	Asp	Ser	Ile	His	Gln	Leu	Gly	Phe	
195					200					205						
Ile	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Leu	Leu	Leu	Asp	Ser	Lys	Gly	
210					215					220						
His	Val	Lys	Leu	Ser	Asp	Phe	Gly	Leu	Cys	Thr	Gly	Leu	Lys	Lys	Ala	
225					230					235					240	
His	Arg	Thr	Glu	Phe	Tyr	Arg	Asn	Leu	Asn	His	Ser	Leu	Pro	Ser	Asp	
245					250					255						
Phe	Thr	Phe	Gln	Asn	Met	Asn	Ser	Lys	Arg	Lys	Ala	Glu	Thr	Trp	Lys	
260					265					270						
Arg	Asn	Arg	Arg	Gln	Leu	Ala	Phe	Ser	Thr	Val	Gly	Thr	Pro	Asp	Tyr	
275					280					285						
Ile	Ala	Pro	Glu	Val	Phe	Met	Gln	Thr	Gly	Tyr	Asn	Lys	Leu	Cys	Asp	
290					295					300						
Trp	Trp	Ser	Leu	Gly	Val	Ile	Met	Tyr	Glu	Met	Leu	Ile	Gly	Lys	Leu	
305					310					315					320	
His	Gly	Phe	Arg	Gly	Leu	Phe	Leu	Cys	Ile	His	Asp	Arg	Leu	Leu	His	
325					330					335						

<210> 181

<211> 415

<212> PRT

<213> Homo sapiens

<220>

<221> -

<222> (1)..(415)

<223> "XAA " can be any amino acid

<400> 181

Xaa	Arg	His	Glu	Ser	Ala	Arg	Ala	Ala	Arg	Val	Ser	Gly	Gly	Ser	Met
1				5					10					15	
Leu	Asp	Ile	Ile	Lys	Tyr	Ile	Val	Asn	Arg	Gly	Glu	His	Lys	Asn	Gly
		20						25					30		
Val	Leu	Glu	Glu	Ala	Ile	Ile	Ala	Thr	Ile	Leu	Lys	Glu	Val	Leu	Glu
		35					40					45			
Gly	Leu	Asp	Tyr	Leu	His	Arg	Asn	Gly	Gln	Ile	His	Arg	Asp	Leu	Lys
	50					55					60				
Ala	Gly	Asn	Ile	Leu	Leu	Gly	Glu	Asp	Gly	Ser	Val	Gln	Ile	Ala	Asp
65					70					75					80
Phe	Gly	Val	Ser	Ala	Phe	Leu	Ala	Thr	Gly	Gly	Asp	Val	Thr	Arg	Asn
				85					90					95	
Lys	Val	Arg	Lys	Thr	Phe	Val	Gly	Thr	Pro	Cys	Trp	Met	Ala	Pro	Glu
			100					105					110		
Val	Met	Glu	Gln	Val	Arg	Gly	Tyr	Asp	Phe	Lys	Ala	Asp	Met	Trp	Ser
		115					120					125			
Phe	Gly	Ile	Thr	Ala	Ile	Glu	Leu	Ala	Thr	Gly	Ala	Ala	Pro	Tyr	His
	130					135					140				
Lys	Tyr	Pro	Pro	Met	Lys	Val	Leu	Met	Leu	Thr	Leu	Gln	Asn	Asp	Pro
145					150					155					160
Pro	Thr	Leu	Glu	Thr	Gly	Val	Glu	Asp	Lys	Glu	Met	Met	Lys	Lys	Tyr
				165					170					175	
Gly	Lys	Ser	Phe	Arg	Lys	Leu	Leu	Ser	Leu	Cys	Leu	Gln	Lys	Asp	Pro
			180					185					190		
Ser	Lys	Arg	Pro	Thr	Ala	Ala	Glu	Leu	Leu	Lys	Cys	Lys	Phe	Phe	Gln
		195					200					205			
Lys	Ala	Lys	Asn	Arg	Glu	Tyr	Leu	Ile	Glu	Lys	Leu	Leu	Thr	Arg	Thr
	210					215					220				
Pro	Asp	Ile	Ala	Gln	Arg	Ala	Lys	Lys	Val	Arg	Arg	Val	Pro	Gly	Ser
225					230					235					240
Ser	Gly	His	Leu	His	Lys	Thr	Glu	Asp	Gly	Asp	Trp	Glu	Trp	Ser	Asp
				245					250					255	
Asp	Glu	Met	Asp	Glu	Lys	Ser	Glu	Glu	Gly	Lys	Ala	Ala	Phe	Ser	Gln
			260					265					270		
Glu	Lys	Ser	Arg	Arg	Val	Lys	Glu	Glu	Asn	Pro	Glu	Ile	Ala	Val	Ser
			275				280					285			

Ala Ser Thr Ile Pro Glu Gln Ile Gln Ser Leu Ser Val His Asp Ser
 290 295 300

Gln Gly Pro Pro Asn Ala Asn Glu Asp Tyr Arg Glu Ala Ser Ser Cys
 305 310 315 320

Ala Val Asn Leu Val Leu Arg Leu Arg Asn Ser Arg Lys Glu Leu Asn
 325 330 335

Asp Ile Arg Phe Glu Phe Thr Pro Gly Arg Asp Thr Ala Asp Gly Val
 340 345 350

Ser Gln Glu Leu Phe Ser Ala Gly Leu Val Asp Gly His Asp Val Val
 355 360 365

Ile Val Ala Ala Asn Leu Gln Lys Ile Val Asp Asp Pro Lys Ala Leu
 370 375 380

Lys Thr Leu Thr Phe Lys Leu Ala Ser Gly Cys Asp Gly Ser Glu Ile
 385 390 395 400

Pro Asp Glu Val Lys Leu Ile Gly Phe Ala Gln Leu Ser Val Ser
 405 410 415

<210> 182
 <211> 409
 <212> PRT
 <213> Homo sapiens

<220>
 <221> -
 <222> (1)..(409)
 <223> "Xaa" can be any amino acid

<400> 182

Xaa Arg His Glu Ser Ala Arg Ala Ala Arg Val Ser Gly Gly Ser Met
 1 5 10 15

Leu Asp Ile Ile Lys Tyr Ile Val Asn Arg Gly Glu His Lys Asn Gly
 20 25 30

Val Leu Glu Glu Ala Ile Ile Ala Thr Ile Leu Lys Glu Val Leu Glu
 35 40 45

Gly Leu Asp Tyr Leu His Arg Asn Gly Gln Ile His Arg Asp Leu Lys
 50 55 60

Ala Gly Asn Ile Leu Leu Gly Glu Asp Gly Ser Val Gln Ile Ala Asp
 65 70 75 80

Phe Gly Val Ser Ala Phe Leu Ala Thr Gly Gly Asp Val Thr Arg Asn
 85 90 95

Lys Val Arg Lys Thr Phe Val Gly Thr Pro Cys Trp Met Ala Pro Glu
 100 105 110

Val	Met	Glu	Gln	Val	Arg	Gly	Tyr	Asp	Phe	Lys	Ala	Asp	Met	Trp	Ser	115	120	125
Phe	Gly	Ile	Thr	Ala	Ile	Glu	Leu	Ala	Thr	Gly	Ala	Ala	Pro	Tyr	His	130	135	140
Lys	Tyr	Pro	Pro	Met	Lys	Val	Leu	Met	Leu	Thr	Leu	Gln	Asn	Asp	Pro	145	150	155
Pro	Thr	Leu	Glu	Thr	Gly	Val	Glu	Asp	Lys	Glu	Met	Met	Lys	Lys	Tyr	165	170	175
Gly	Lys	Ser	Phe	Arg	Lys	Leu	Leu	Ser	Leu	Cys	Leu	Gln	Lys	Asp	Pro	180	185	190
Ser	Lys	Arg	Pro	Thr	Ala	Ala	Glu	Leu	Leu	Lys	Cys	Lys	Phe	Phe	Gln	195	200	205
Lys	Ala	Lys	Asn	Arg	Glu	Tyr	Leu	Ile	Glu	Lys	Leu	Leu	Thr	Arg	Thr	210	215	220
Pro	Asp	Ile	Ala	Gln	Arg	Ala	Lys	Lys	Val	Arg	Arg	Val	Pro	Gly	Ser	225	230	235
Ser	Gly	His	Leu	His	Lys	Thr	Glu	Asp	Gly	Asp	Trp	Glu	Trp	Ser	Asp	245	250	255
Asp	Glu	Met	Asp	Glu	Lys	Ser	Glu	Glu	Gly	Lys	Ala	Ala	Phe	Ser	Gln	260	265	270
Glu	Lys	Ser	Arg	Arg	Val	Lys	Glu	Glu	Asn	Pro	Glu	Ile	Ala	Val	Ser	275	280	285
Ala	Ser	Thr	Ile	Pro	Glu	Gln	Ile	Gln	Ser	Leu	Ser	Val	His	Asp	Ser	290	295	300
Gln	Gly	Pro	Pro	Asn	Ala	Asn	Glu	Asp	Tyr	Arg	Glu	Ala	Ser	Ser	Cys	305	310	315
Ala	Val	Asn	Leu	Val	Leu	Arg	Leu	Arg	Asn	Ser	Arg	Lys	Glu	Leu	Asn	325	330	335
Asp	Ile	Arg	Phe	Glu	Phe	Thr	Pro	Gly	Arg	Asp	Thr	Ala	Asp	Gly	Val	340	345	350
Ser	Gln	Glu	Leu	Phe	Ser	Ala	Gly	Leu	Val	Asp	Gly	His	Asp	Val	Val	355	360	365
Ile	Val	Ala	Ala	Asn	Leu	Gln	Lys	Ile	Val	Asp	Asp	Pro	Lys	Ala	Leu	370	375	380
Lys	Thr	Leu	Thr	Phe	Lys	Leu	Asn	Gln	Phe	Leu	His	Leu	Glu	Ala	Phe	385	390	395
Asp	Ser	Ala	Ala	Leu	Gly	Asn	Val	Phe								405		

<400> 183

Met 1	Pro	Ala	Arg 5	Arg	Leu	Leu	Leu	Leu	Leu 10	Thr	Leu	Leu	Leu	Pro 15	Gly
Leu	Gly	Ile	Phe 20	Gly	Ser	Thr	Ser	Thr	Val	Thr	Leu	Pro	Glu 30	Thr	Leu
Leu	Phe 35	Val	Ser	Thr	Leu	Asp	Gly 40	Ser	Leu	His	Ala	Val 45	Ser	Lys	Arg
Thr 50	Gly	Ser	Ile	Lys	Trp	Thr 55	Leu	Lys	Glu	Asp	Pro 60	Val	Leu	Gln	Val
Pro 65	Thr	His	Val	Glu 70	Glu	Pro	Ala	Phe	Leu	Pro 75	Asp	Pro	Asn	Asp	Gly 80
Ser	Leu	Tyr	Thr 85	Leu	Gly	Ser	Lys	Asn	Asn 90	Glu	Gly	Leu	Thr 95	Lys	Leu
Pro	Phe	Thr	Ile 100	Pro	Glu	Leu	Val	Gln	Ala 105	Ser	Pro	Cys	Arg 110	Ser	Ser
Asp	Gly	Ile 115	Leu	Tyr	Met	Gly	Lys	Lys	Gln	Asp	Ile	Trp	Tyr 125	Val	Ile
Asp 130	Leu	Leu	Thr	Gly	Glu	Lys 135	Gln	Gln	Thr	Leu	Ser 140	Ser	Ala	Phe	Ala
Asp 145	Ser	Leu	Cys	Pro 150	Ser	Thr	Ser	Leu	Leu	Tyr 155	Leu	Gly	Arg	Thr	Glu 160
Tyr	Thr	Ile	Thr 165	Met	Tyr	Asp	Thr	Lys	Thr 170	Arg	Glu	Leu	Arg 175	Trp	Asn
Ala	Thr	Tyr	Phe 180	Asp	Tyr	Ala	Ala	Ser	Leu 185	Pro	Glu	Asp	Glu 190	Gly	Asp
Tyr	Lys 195	Met	Ser	His	Phe	Val	Ser	Asn	Gly	Asp	Gly	Leu 205	Val	Val	Thr
Val 210	Asp	Ser	Glu	Ser	Gly	Asp 215	Val	Leu	Trp	Ile	Gln	Asn	Tyr	Ala	Ser
Pro 225	Val	Val	Ala	Phe 230	Tyr	Val	Trp	Gln	Arg	Glu 235	Gly	Leu	Arg	Lys	Val 240
Met	His	Ile	Asn 245	Val	Ala	Val	Glu	Thr	Leu 250	Arg	Tyr	Leu	Thr 255	Phe	Met
Ser	Gly	Glu	Val	Gly	Arg	Ile	Thr	Lys	Trp	Lys	Tyr	Pro	Phe	Pro	Lys

260					265					270					
Glu	Thr	Glu	Ala	Lys	Ser	Lys	Leu	Thr	Pro	Thr	Leu	Tyr	Val	Gly	Lys
		275					280					285			
Tyr	Ser	Thr	Ser	Leu	Tyr	Ala	Ser	Pro	Ser	Met	Val	His	Glu	Gly	Val
		290				295					300				
Ala	Val	Val	Pro	Arg	Gly	Ser	Thr	Leu	Pro	Leu	Leu	Glu	Gly	Pro	Gln
305					310					315					320
Thr	Asp	Gly	Val	Thr	Ile	Gly	Asp	Lys	Gly	Glu	Cys	Val	Ile	Thr	Pro
				325					330					335	
Ser	Thr	Asp	Val	Lys	Phe	Asp	Pro	Gly	Leu	Lys	Ser	Lys	Asn	Lys	Leu
			340					345					350		
Asn	Tyr	Leu	Arg	Asn	Tyr	Trp	Leu	Leu	Ile	Gly	His	His	Glu	Thr	Pro
		355					360					365			
Leu	Ser	Ala	Ser	Thr	Lys	Met	Leu	Glu	Arg	Phe	Pro	Asn	Asn	Leu	Pro
		370				375					380				
Lys	His	Arg	Glu	Asn	Val	Ile	Pro	Ala	Asp	Ser	Glu	Lys	Lys	Ser	Phe
385				390					395						400
Glu	Glu	Val	Ile	Asn	Leu	Val	Asp	Gln	Thr	Ser	Glu	Asn	Ala	Pro	Thr
				405					410					415	
Thr	Val	Ser	Arg	Asp	Val	Glu	Glu	Lys	Pro	Ala	His	Ala	Pro	Ala	Arg
			420					425					430		
Pro	Glu	Ala	Pro	Val	Asp	Ser	Met	Leu	Lys	Asp	Met	Ala	Thr	Ile	Ile
		435					440					445			
Leu	Ser	Thr	Phe	Leu	Leu	Ile	Gly	Trp	Val	Ala	Phe	Ile	Ile	Thr	Tyr
		450				455					460				
Pro	Leu	Ser	Met	His	Gln	Gln	Gln	Gln	Leu	Gln	His	Gln	Gln	Phe	Gln
465				470					475						480
Lys	Glu	Leu	Glu	Lys	Ile	Gln	Leu	Leu	Gln	Gln	Gln	Gln	Gln	Gln	Leu
				485					490					495	
Pro	Phe	His	Pro	Pro	Gly	Asp	Thr	Ala	Gln	Asp	Gly	Glu	Leu	Leu	Asp
			500					505					510		
Thr	Ser	Gly	Pro	Tyr	Ser	Glu	Ser	Ser	Gly	Thr	Ser	Ser	Pro	Ser	Thr
		515					520					525			
Ser	Pro	Arg	Ala	Ser	Asn	His	Ser	Leu	Cys	Ser	Gly	Ser	Ser	Ala	Ser
		530				535					540				
Lys	Ala	Gly	Ser	Ser	Pro	Ser	Leu	Glu	Gln	Asp	Asp	Gly	Asp	Glu	Glu
545				550					555					560	
Thr	Ser	Val	Val	Ile	Val	Gly	Lys	Ile	Ser	Phe	Cys	Pro	Lys	Asp	Val

565										570					575						
Leu	Gly	His	Gly	Ala	Glu	Gly	Thr	Ile	Val	Tyr	Arg	Gly	Met	Phe	Asp						
			580					585					590								
Asn	Arg	Asp	Val	Ala	Val	Lys	Arg	Ile	Leu	Pro	Glu	Cys	Phe	Ser	Phe						
		595					600					605									
Ala	Asp	Arg	Glu	Val	Gln	Leu	Leu	Arg	Glu	Ser	Asp	Glu	His	Pro	Asn						
	610					615					620										
Val	Ile	Arg	Tyr	Phe	Cys	Thr	Glu	Lys	Asp	Arg	Gln	Phe	Gln	Tyr	Ile						
625					630				635						640						
Ala	Ile	Glu	Leu	Cys	Ala	Ala	Thr	Leu	Gln	Glu	Tyr	Val	Glu	Gln	Lys						
				645					650						655						
Asp	Phe	Ala	His	Leu	Gly	Leu	Glu	Pro	Ile	Thr	Leu	Leu	Gln	Gln	Thr						
			660					665						670							
Thr	Ser	Gly	Leu	Ala	His	Leu	His	Ser	Leu	Asn	Ile	Val	His	Arg	Asp						
		675					680					685									
Leu	Lys	Pro	His	Asn	Ile	Leu	Ile	Ser	Met	Pro	Asn	Ala	His	Gly	Lys						
	690					695					700										
Ile	Lys	Ala	Met	Ile	Ser	Asp	Phe	Gly	Leu	Cys	Lys	Lys	Leu	Ala	Val						
705					710					715					720						
Gly	Arg	His	Ser	Phe	Ser	Arg	Arg	Ser	Gly	Val	Pro	Gly	Thr	Glu	Gly						
				725					730					735							
Trp	Ile	Ala	Pro	Glu	Met	Leu	Ser	Glu	Asp	Cys	Lys	Glu	Asn	Pro	Thr						
			740					745						750							
Tyr	Thr	Val	Asp	Ile	Phe	Ser	Ala	Gly	Cys	Val	Phe	Tyr	Tyr	Val	Val						
		755					760					765									
Ser	Glu	Gly	Ser	His	Pro	Phe	Gly	Lys	Ser	Leu	Gln	Arg	Gln	Ala	Asn						
	770					775					780										
Ile	Leu	Leu	Gly	Ala	Cys	Ser	Leu	Asp	Cys	Leu	His	Pro	Glu	Lys	His						
785					790					795					800						
Glu	Asp	Val	Ile	Ala	Arg	Glu	Leu	Ile	Glu	Lys	Met	Ile	Ala	Met	Asp						
				805					810					815							
Pro	Gln	Lys	Arg	Pro	Ser	Ala	Asn	Asp	Val	Leu	Lys	His	Pro	Phe	Phe						
			820					825					830								
Trp	Ser	Leu	Glu	Lys	Gln	Leu	Gln	Phe	Phe	Gln	Asp	Val	Ser	Asp	Arg						
		835					840						845								
Ile	Glu	Lys	Glu	Ser	Leu	Asp	Gly	Pro	Ile	Val	Lys	Gln	Leu	Glu	Arg						
	850					855					860										
Gly	Gly	Arg	Ala	Val	Val	Lys	Met	Asp	Trp	Arg	Glu	Asn	Ile	Thr	Asp						

865		870		875		880									
Pro	Leu	Gln	Thr	Asp	Leu	Arg	Lys	Phe	Arg	Thr	Tyr	Lys	Gly	Gly	Ser
				885					890					895	
Val	Arg	Asp	Leu	Leu	Arg	Ala	Met	Arg	Asn	Lys	Lys	His	His	Tyr	Arg
			900					905					910		
Glu	Leu	Pro	Ala	Glu	Val	Arg	Glu	Thr	Leu	Gly	Thr	Leu	Pro	Asp	Asp
		915					920					925			
Phe	Val	Cys	Tyr	Phe	Thr	Ser	Arg	Phe	Pro	His	Leu	Leu	Ala	His	Thr
	930					935					940				
Tyr	Arg	Ala	Met	Glu	Leu	Cys	Ser	His	Glu	Arg	Leu	Phe	Gln	Pro	Tyr
945					950					955					960
Tyr	Phe	His	Glu	Pro	Pro	Glu	Pro	Gln	Pro	Pro	Val	Thr	Pro	Asp	Ala
			965					970						975	

Leu

<210> 184
 <211> 540
 <212> PRT
 <213> Homo sapiens

<400> 184

Met	Asn	Gly	Glu	Ala	Ile	Cys	Ser	Ala	Leu	Pro	Thr	Ile	Pro	Tyr	His
1				5					10					15	
Lys	Leu	Ala	Asp	Leu	Arg	Tyr	Leu	Ser	Arg	Gly	Ala	Ser	Gly	Thr	Val
			20					25					30		
Ser	Ser	Ala	Arg	His	Ala	Asp	Trp	Arg	Val	Gln	Val	Ala	Val	Lys	His
		35					40					45			
Leu	His	Ile	His	Thr	Pro	Leu	Leu	Asp	Ser	Glu	Arg	Lys	Asp	Val	Leu
	50					55					60				
Arg	Glu	Ala	Glu	Ile	Leu	His	Lys	Ala	Arg	Phe	Ser	Tyr	Ile	Leu	Pro
65					70					75					80
Ile	Leu	Gly	Ile	Cys	Asn	Glu	Pro	Glu	Phe	Leu	Gly	Ile	Val	Thr	Glu
			85						90					95	
Tyr	Met	Pro	Asn	Gly	Ser	Leu	Asn	Glu	Leu	Leu	His	Arg	Lys	Thr	Glu
			100					105					110		
Tyr	Pro	Asp	Val	Ala	Trp	Pro	Leu	Arg	Phe	Arg	Ile	Leu	His	Glu	Ile
		115					120					125			
Ala	Leu	Gly	Val	Asn	Tyr	Leu	His	Asn	Met	Thr	Pro	Pro	Leu	Leu	His
	130					135					140				

His	Asp	Leu	Lys	Thr	Gln	Asn	Ile	Leu	Leu	Asp	Asn	Glu	Phe	His	Val	145	150	155	160
Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ser	Lys	Trp	Arg	Met	Met	Ser	Leu	Ser	165	170		175
Gln	Ser	Arg	Ser	Ser	Lys	Ser	Ala	Pro	Glu	Gly	Gly	Thr	Ile	Ile	Tyr	180	185		190
Met	Pro	Pro	Glu	Asn	Tyr	Glu	Pro	Gly	Gln	Lys	Ser	Arg	Ala	Ser	Ile	195	200		205
Lys	His	Asp	Ile	Tyr	Ser	Tyr	Ala	Val	Ile	Thr	Trp	Glu	Val	Leu	Ser	210	215		220
Arg	Lys	Gln	Pro	Phe	Glu	Asp	Val	Thr	Asn	Pro	Leu	Gln	Ile	Met	Tyr	225	230		235
Ser	Val	Ser	Gln	Gly	His	Arg	Pro	Val	Ile	Asn	Glu	Glu	Ser	Leu	Pro	245	250		255
Tyr	Asp	Ile	Pro	His	Arg	Ala	Arg	Met	Ile	Ser	Leu	Ile	Glu	Ser	Gly	260	265		270
Trp	Ala	Gln	Asn	Pro	Asp	Glu	Arg	Pro	Ser	Phe	Leu	Lys	Cys	Leu	Ile	275	280		285
Glu	Leu	Glu	Pro	Val	Leu	Arg	Thr	Phe	Glu	Glu	Ile	Thr	Phe	Leu	Glu	290	295		300
Ala	Val	Ile	Gln	Leu	Lys	Lys	Thr	Lys	Leu	Gln	Ser	Val	Ser	Ser	Ala	305	310		315
Ile	His	Leu	Cys	Asp	Lys	Lys	Lys	Met	Glu	Leu	Ser	Leu	Asn	Ile	Pro	325	330		335
Val	Asn	His	Gly	Pro	Gln	Glu	Glu	Ser	Cys	Gly	Ser	Ser	Gln	Leu	His	340	345		350
Glu	Asn	Ser	Gly	Ser	Pro	Glu	Thr	Ser	Arg	Ser	Leu	Pro	Ala	Pro	Gln	355	360		365
Asp	Asn	Asp	Phe	Leu	Ser	Arg	Lys	Ala	Gln	Asp	Cys	Tyr	Phe	Met	Lys	370	375		380
Leu	His	His	Cys	Pro	Gly	Asn	His	Ser	Trp	Asp	Ser	Thr	Ile	Ser	Gly	385	390		395
Ser	Gln	Arg	Ala	Ala	Phe	Cys	Asp	His	Lys	Thr	Thr	Pro	Cys	Ser	Ser	405	410		415
Ala	Ile	Ile	Asn	Pro	Leu	Ser	Thr	Ala	Gly	Asn	Ser	Glu	Arg	Leu	Gln	420	425		430
Pro	Gly	Ile	Ala	Gln	Gln	Trp	Ile	Gln	Ser	Lys	Arg	Glu	Asp	Ile	Val	435	440		445

Asn Gln Met Thr Glu Ala Cys Leu Asn Gln Ser Leu Asp Ala Leu Leu
450 455 460

Ser Arg Asp Leu Ile Met Lys Glu Asp Tyr Glu Leu Val Ser Thr Lys
465 470 475 480

Pro Thr Arg Thr Ser Lys Val Arg Gln Leu Leu Asp Thr Thr Asp Ile
485 490 495

Gln Gly Glu Glu Phe Ala Lys Val Ile Val Gln Lys Leu Lys Asp Asn
500 505 510

Lys Gln Met Gly Leu Gln Pro Tyr Pro Glu Ile Leu Val Val Ser Arg
515 520 525

Ser Pro Ser Leu Asn Leu Leu Gln Asn Lys Ser Met
530 535 540

<210> 185

<211> 689

<212> PRT

<213> Homo sapiens

<400> 185

Met Ala Asp Leu Glu Ala Val Leu Ala Asp Val Ser Tyr Leu Met Ala
1 5 10 15

Met Glu Lys Ser Lys Ala Thr Pro Ala Ala Arg Ala Ser Lys Lys Ile
20 25 30

Leu Leu Pro Glu Pro Ser Ile Arg Ser Val Met Gln Lys Tyr Leu Glu
35 40 45

Asp Arg Gly Glu Val Thr Phe Glu Lys Ile Phe Ser Gln Lys Leu Gly
50 55 60

Tyr Leu Leu Phe Arg Asp Phe Cys Leu Asn His Leu Glu Glu Ala Arg
65 70 75 80

Pro Leu Val Glu Phe Tyr Glu Glu Ile Lys Lys Tyr Glu Lys Leu Glu
85 90 95

Thr Glu Glu Glu Arg Val Ala Arg Ser Arg Glu Ile Phe Asp Ser Tyr
100 105 110

Ile Met Lys Glu Leu Leu Ala Cys Ser His Pro Phe Ser Lys Ser Ala
115 120 125

Thr Glu His Val Gln Gly His Leu Gly Lys Lys Gln Val Pro Pro Asp
130 135 140

Leu Phe Gln Pro Tyr Ile Glu Glu Ile Cys Gln Asn Leu Arg Gly Asp
145 150 155 160

Val Phe Gln Lys Phe Ile Glu Ser Asp Lys Phe Thr Arg Phe Cys Gln
165 170 175

Trp	Lys	Asn	Val	Glu	Leu	Asn	Ile	His	Leu	Thr	Met	Asn	Asp	Phe	Ser	180	185	190	
Val	His	Arg	Ile	Ile	Gly	Arg	Gly	Gly	Phe	Gly	Glu	Val	Tyr	Gly	Cys	195	200	205	
Arg	Lys	Arg	Asp	Thr	Gly	Lys	Met	Tyr	Ala	Met	Lys	Cys	Leu	Asp	Lys	210	215	220	
Lys	Arg	Ile	Lys	Met	Lys	Gln	Gly	Glu	Thr	Leu	Ala	Leu	Asn	Glu	Arg	225	230	235	240
Ile	Met	Leu	Ser	Leu	Val	Ser	Thr	Gly	Asp	Cys	Pro	Phe	Ile	Val	Cys	245	250	255	
Met	Ser	Tyr	Ala	Phe	His	Thr	Pro	Asp	Lys	Leu	Ser	Phe	Ile	Leu	Asp	260	265	270	
Leu	Met	Asn	Gly	Gly	Asp	Leu	His	Tyr	His	Leu	Ser	Gln	His	Gly	Val	275	280	285	
Phe	Ser	Glu	Ala	Asp	Met	Arg	Phe	Tyr	Ala	Ala	Glu	Ile	Ile	Leu	Gly	290	295	300	
Leu	Glu	His	Met	His	Asn	Arg	Phe	Val	Val	Tyr	Arg	Asp	Leu	Lys	Pro	305	310	315	320
Ala	Asn	Ile	Leu	Leu	Asp	Glu	His	Gly	His	Val	Arg	Ile	Ser	Asp	Leu	325	330	335	
Gly	Leu	Ala	Cys	Asp	Phe	Ser	Lys	Lys	Lys	Pro	His	Ala	Ser	Val	Gly	340	345	350	
Thr	His	Gly	Tyr	Met	Ala	Pro	Glu	Val	Leu	Gln	Lys	Gly	Val	Ala	Tyr	355	360	365	
Asp	Ser	Ser	Ala	Asp	Trp	Phe	Ser	Leu	Gly	Cys	Met	Leu	Phe	Lys	Leu	370	375	380	
Leu	Arg	Gly	His	Ser	Pro	Phe	Arg	Gln	His	Lys	Thr	Lys	Asp	Lys	His	385	390	395	400
Glu	Ile	Asp	Arg	Met	Thr	Leu	Thr	Met	Ala	Val	Glu	Leu	Pro	Asp	Ser	405	410	415	
Phe	Ser	Pro	Glu	Leu	His	Ser	Leu	Leu	Glu	Gly	Leu	Leu	Gln	Arg	Asp	420	425	430	
Val	Asn	Arg	Arg	Leu	Gly	Cys	Leu	Gly	Arg	Gly	Ala	Gln	Glu	Val	Lys	435	440	445	
Glu	Ser	Pro	Phe	Phe	Arg	Ser	Leu	Asp	Trp	Gln	Met	Val	Phe	Leu	Gln	450	455	460	
Arg	Tyr	Pro	Pro	Pro	Leu	Ile	Pro	Pro	Arg	Gly	Glu	Val	Asn	Ala	Ala	465	470	475	480

Asp Ala Phe Asp Ile Gly Ser Phe Asp Glu Glu Asp Thr Lys Gly Ile
 485 490 495
 Lys Leu Leu Asp Ser Asp Gln Glu Leu Tyr Arg Asn Phe Pro Leu Thr
 500 505 510
 Ile Ser Glu Arg Trp Gln Gln Glu Val Ala Glu Thr Val Phe Asp Thr
 515 520 525
 Ile Asn Ala Glu Thr Asp Arg Leu Glu Ala Arg Lys Lys Ala Lys Asn
 530 535 540
 Lys Gln Leu Gly His Glu Glu Asp Tyr Ala Leu Gly Lys Asp Cys Ile
 545 550 555 560
 Met His Gly Tyr Met Ser Lys Met Gly Asn Pro Phe Leu Thr Gln Trp
 565 570 575
 Gln Arg Arg Tyr Phe Tyr Leu Phe Pro Asn Arg Leu Glu Trp Arg Gly
 580 585 590
 Glu Gly Glu Ala Pro Gln Ser Leu Leu Thr Met Glu Glu Ile Gln Ser
 595 600 605
 Val Glu Glu Thr Gln Ile Lys Glu Arg Lys Cys Leu Leu Leu Lys Ile
 610 615 620
 Arg Gly Gly Lys Gln Phe Ile Leu Gln Cys Asp Ser Asp Pro Glu Leu
 625 630 635 640
 Val Gln Trp Lys Lys Glu Leu Arg Asp Ala Tyr Arg Glu Ala Gln Gln
 645 650 655
 Leu Val Gln Arg Val Pro Lys Met Lys Asn Lys Pro Arg Ser Pro Val
 660 665 670
 Val Glu Leu Ser Lys Val Pro Leu Val Gln Arg Gly Ser Ala Asn Gly
 675 680 685

Leu

<210> 186
 <211> 505
 <212> PRT
 <213> Homo sapiens

<400> 186

Met Gly Leu Val Ser Ser Lys Lys Pro Asp Lys Glu Lys Pro Ile Lys
 1 5 10 15
 Glu Lys Asp Lys Gly Gln Trp Ser Pro Leu Lys Val Ser Ala Gln Asp
 20 25 30
 Lys Asp Ala Pro Pro Leu Pro Pro Leu Val Val Phe Asn His Leu Thr

35					40					45					
Pro	Pro	Pro	Pro	Asp	Glu	His	Leu	Asp	Glu	Asp	Lys	His	Phe	Val	Val
50						55					60				
Ala	Leu	Tyr	Asp	Tyr	Thr	Ala	Met	Asn	Asp	Arg	Asp	Leu	Gln	Met	Leu
65					70					75					80
Lys	Gly	Glu	Lys	Leu	Gln	Val	Leu	Lys	Gly	Thr	Gly	Asp	Trp	Trp	Leu
				85					90					95	
Ala	Arg	Ser	Leu	Val	Thr	Gly	Arg	Glu	Gly	Tyr	Val	Pro	Ser	Asn	Phe
			100					105					110		
Val	Ala	Arg	Val	Glu	Ser	Leu	Glu	Met	Glu	Arg	Trp	Phe	Phe	Arg	Ser
			115				120					125			
Gln	Gly	Arg	Lys	Glu	Ala	Glu	Arg	Gln	Leu	Leu	Ala	Pro	Ile	Asn	Lys
	130					135					140				
Ala	Gly	Ser	Phe	Leu	Ile	Arg	Glu	Ser	Glu	Thr	Asn	Lys	Gly	Ala	Phe
145					150					155					160
Ser	Leu	Ser	Val	Lys	Asp	Val	Thr	Thr	Gln	Gly	Glu	Leu	Ile	Lys	His
				165					170					175	
Tyr	Lys	Ile	Arg	Cys	Leu	Asp	Glu	Gly	Gly	Tyr	Tyr	Ile	Ser	Pro	Arg
			180					185					190		
Ile	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val	Gln	His	Tyr	Ser	Lys	Lys
	195						200					205			
Gly	Asp	Gly	Leu	Cys	Gln	Arg	Leu	Thr	Leu	Pro	Cys	Val	Arg	Pro	Ala
	210					215					220				
Pro	Gln	Asn	Pro	Trp	Ala	Gln	Asp	Glu	Trp	Glu	Ile	Pro	Arg	Gln	Ser
225					230					235					240
Leu	Arg	Leu	Val	Arg	Lys	Leu	Gly	Ser	Gly	Gln	Phe	Gly	Glu	Val	Trp
				245					250					255	
Met	Gly	Tyr	Tyr	Lys	Asn	Asn	Met	Lys	Val	Ala	Ile	Lys	Thr	Leu	Lys
			260					265					270		
Glu	Gly	Thr	Met	Ser	Pro	Glu	Ala	Phe	Leu	Gly	Glu	Ala	Asn	Val	Met
		275					280					285			
Lys	Ala	Leu	Gln	His	Glu	Arg	Leu	Val	Arg	Leu	Tyr	Ala	Val	Val	Thr
	290					295					300				
Lys	Glu	Pro	Ile	Tyr	Ile	Val	Thr	Glu	Tyr	Met	Ala	Arg	Gly	Cys	Leu
305					310					315					320
Leu	Asp	Phe	Leu	Lys	Thr	Asp	Glu	Gly	Ser	Arg	Leu	Ser	Leu	Pro	Arg
				325					330					335	
Leu	Ile	Asp	Met	Ser	Ala	Gln	Ile	Ala	Glu	Gly	Met	Ala	Tyr	Ile	Glu

340	345	350
Arg Met Asn Ser Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val		
355	360	365
Ser Glu Ala Leu Cys Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Ile		
370	375	380
Ile Asp Ser Glu Tyr Thr Ala Gln Glu Gly Ala Lys Phe Pro Ile Lys		
385	390	395
Trp Thr Ala Pro Glu Ala Tyr His Phe Gly Val Phe Thr Ile Lys Ala		
	405	410
Asp Val Trp Ser Phe Gly Val Leu Leu Met Glu Val Val Thr Tyr Gly		
	420	425
Arg Val Pro Tyr Pro Gly Met Ser Asn Pro Glu Val Ile Arg Asn Leu		
	435	440
Glu Arg Gly Tyr Arg Met Pro Arg Pro Asp Thr Cys Pro Pro Glu Leu		
	450	455
Tyr Arg Gly Val Ile Ala Glu Cys Trp Arg Ser Arg Pro Glu Glu Arg		
465	470	475
Pro Thr Phe Glu Phe Leu Gln Ser Val Leu Glu Asp Phe Tyr Thr Ala		
	485	490
Thr Glu Arg Gln Tyr Glu Leu Gln Pro		
	500	505
<210> 187		
<211> 298		
<212> PRT		
<213> Homo sapiens		
<400> 187		
Met Glu Asn Phe Gln Lys Val Glu Lys Ile Gly Glu Gly Thr Tyr Gly		
1	5	10
Val Val Tyr Lys Ala Arg Asn Lys Leu Thr Gly Glu Val Val Ala Leu		
	20	25
Lys Lys Ile Arg Leu Asp Thr Glu Thr Glu Gly Val Pro Ser Thr Ala		
35	40	45
Ile Arg Glu Ile Ser Leu Leu Lys Glu Leu Asn His Pro Asn Ile Val		
50	55	60
Lys Leu Leu Asp Val Ile His Thr Glu Asn Lys Leu Tyr Leu Val Phe		
65	70	75
Glu Phe Leu His Gln Asp Leu Lys Lys Phe Met Asp Ala Ser Ala Leu		
	85	90
		95

Thr Gly Ile Pro Leu Pro Leu Ile Lys Ser Tyr Leu Phe Gln Leu Leu
 100 105 110
 Gln Gly Leu Ala Phe Cys His Ser His Arg Val Leu His Arg Asp Leu
 115 120 125
 Lys Pro Gln Asn Leu Leu Ile Asn Thr Glu Gly Ala Ile Lys Leu Ala
 130 135 140
 Asp Phe Gly Leu Ala Arg Ala Phe Gly Val Pro Val Arg Thr Tyr Thr
 145 150 155 160
 His Glu Val Val Thr Leu Trp Tyr Arg Ala Pro Glu Ile Leu Leu Gly
 165 170 175
 Ser Lys Tyr Tyr Ser Thr Ala Val Asp Ile Trp Ser Leu Gly Cys Ile
 180 185 190
 Phe Ala Glu Met Val Thr Arg Arg Ala Leu Phe Pro Gly Asp Ser Glu
 195 200 205
 Ile Asp Gln Leu Phe Arg Ile Phe Arg Thr Leu Gly Thr Pro Asp Glu
 210 215 220
 Val Val Trp Pro Gly Val Thr Ser Met Pro Asp Tyr Lys Pro Ser Phe
 225 230 235 240
 Pro Lys Trp Ala Arg Gln Asp Phe Ser Lys Val Val Pro Pro Leu Asp
 245 250 255
 Glu Asp Gly Arg Ser Leu Leu Ser Gln Met Leu His Tyr Asp Pro Asn
 260 265 270
 Lys Arg Ile Ser Ala Lys Ala Ala Leu Ala His Pro Phe Phe Gln Asp
 275 280 285
 Val Thr Lys Pro Val Pro His Leu Arg Leu
 290 295
 <210> 188
 <211> 387
 <212> PRT
 <213> Homo sapiens
 <400> 188
 Met Thr Arg Asp Glu Ala Leu Pro Asp Ser His Ser Ala Gln Asp Phe
 1 5 10 15
 Tyr Glu Asn Tyr Glu Pro Lys Glu Ile Leu Gly Arg Gly Val Ser Ser
 20 25 30
 Val Val Arg Arg Cys Ile His Lys Pro Thr Ser Gln Glu Tyr Ala Val
 35 40 45
 Lys Val Ile Asp Val Thr Gly Gly Gly Ser Phe Ser Pro Glu Glu Val
 50 55 60

Arg	Glu	Leu	Arg	Glu	Ala	Thr	Leu	Lys	Glu	Val	Asp	Ile	Leu	Arg	Lys	65	70	75	80
Val	Ser	Gly	His	Pro	Asn	Ile	Ile	Gln	Leu	Lys	Asp	Thr	Tyr	Glu	Thr	85	90	95	
Asn	Thr	Phe	Phe	Phe	Leu	Val	Phe	Asp	Leu	Met	Lys	Arg	Gly	Glu	Leu	100	105	110	
Phe	Asp	Tyr	Leu	Thr	Glu	Lys	Val	Thr	Leu	Ser	Glu	Lys	Glu	Thr	Arg	115	120	125	
Lys	Ile	Met	Arg	Ala	Leu	Leu	Glu	Val	Ile	Cys	Thr	Leu	His	Lys	Leu	130	135	140	
Asn	Ile	Val	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Leu	Asp	Asp	145	150	155	160
Asn	Met	Asn	Ile	Lys	Leu	Thr	Asp	Phe	Gly	Phe	Ser	Cys	Gln	Leu	Glu	165	170	175	
Pro	Gly	Glu	Arg	Leu	Arg	Glu	Val	Cys	Gly	Thr	Pro	Ser	Tyr	Leu	Ala	180	185	190	
Pro	Glu	Ile	Ile	Glu	Cys	Ser	Met	Asn	Glu	Asp	His	Pro	Gly	Tyr	Gly	195	200	205	
Lys	Glu	Val	Asp	Met	Trp	Ser	Thr	Gly	Val	Ile	Met	Tyr	Thr	Leu	Leu	210	215	220	
Ala	Gly	Ser	Pro	Pro	Phe	Trp	His	Arg	Lys	Gln	Met	Leu	Met	Leu	Arg	225	230	235	240
Met	Ile	Met	Ser	Gly	Asn	Tyr	Gln	Phe	Gly	Ser	Pro	Glu	Trp	Asp	Asp	245	250	255	
Tyr	Ser	Asp	Thr	Val	Lys	Asp	Leu	Val	Ser	Arg	Phe	Leu	Val	Val	Gln	260	265	270	
Pro	Gln	Asn	Arg	Tyr	Thr	Ala	Glu	Glu	Ala	Leu	Ala	His	Pro	Phe	Phe	275	280	285	
Gln	Gln	Tyr	Leu	Val	Glu	Glu	Val	Arg	His	Phe	Ser	Pro	Arg	Gly	Lys	290	295	300	
Phe	Lys	Val	Ile	Ala	Leu	Thr	Val	Leu	Ala	Ser	Val	Arg	Ile	Tyr	Tyr	305	310	315	320
Gln	Tyr	Arg	Arg	Val	Lys	Pro	Val	Thr	Arg	Glu	Ile	Val	Ile	Arg	Asp	325	330	335	
Pro	Tyr	Ala	Leu	Arg	Pro	Leu	Arg	Arg	Leu	Ile	Asp	Ala	Tyr	Ala	Phe	340	345	350	
Arg	Ile	Tyr	Gly	His	Trp	Val	Lys	Lys	Gly	Gln	Gln	Gln	Asn	Arg	Ala	355	360	365	

Ala Leu Phe Glu Asn Thr Pro Lys Ala Val Leu Leu Ser Leu Ala Glu
370 375 380

Glu Asp Tyr
385

<210> 189
<211> 314
<212> PRT
<213> Homo sapiens

<400> 189

Met Gly Arg Cys Arg Ser Val Lys Glu Phe Glu Lys Leu Asn Arg Ile
1 5 10 15

Gly Glu Gly Thr Tyr Gly Ile Val Tyr Arg Ala Arg Asp Thr Gln Thr
20 25 30

Asp Glu Ile Val Ala Leu Lys Lys Val Arg Met Asp Lys Glu Lys Asp
35 40 45

Gly Ile Pro Ile Ser Ser Leu Arg Glu Ile Thr Leu Leu Leu Arg Leu
50 55 60

Arg His Pro Asn Ile Val Glu Leu Lys Glu Val Val Val Gly Asn His
65 70 75 80

Leu Glu Ser Ile Phe Leu Val Met Gly Tyr Cys Glu Gln Asp Leu Ala
85 90 95

Ser Leu Leu Glu Asn Met Pro Thr Pro Phe Ser Glu Ala Gln Val Lys
100 105 110

Cys Ile Val Leu Gln Val Leu Arg Gly Leu Gln Tyr Leu His Arg Asn
115 120 125

Phe Ile Ile His Arg Asp Leu Lys Val Ser Asn Leu Leu Met Thr Asp
130 135 140

Lys Gly Cys Val Lys Thr Ala Asp Phe Gly Leu Ala Arg Ala Tyr Gly
145 150 155 160

Val Pro Val Lys Pro Met Thr Pro Lys Val Val Thr Leu Trp Tyr Arg
165 170 175

Ala Pro Glu Leu Leu Leu Gly Thr Thr Thr Gln Thr Thr Ser Ile Asp
180 185 190

Met Trp Ala Val Gly Cys Ile Leu Ala Glu Leu Leu Ala His Arg Pro
195 200 205

Leu Leu Pro Gly Thr Ser Glu Ile His Gln Ile Asp Leu Ile Val Gln
210 215 220

Leu Leu Gly Thr Pro Ser Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu

225 230 235 240
 Pro Leu Val Gly Gln Tyr Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu
 245 250 255
 Lys His Lys Phe Pro Trp Leu Ser Glu Ala Gly Leu Arg Leu Leu His
 260 265 270
 Phe Leu Phe Met Tyr Asp Pro Lys Lys Arg Ala Thr Ala Gly Asp Cys
 275 280 285
 Leu Glu Ser Ser Tyr Phe Lys Glu Lys Pro Leu Arg Leu Pro Ile Ser
 290 295 300
 Gly Val Cys Glu Gly Cys Arg Glu Pro Gly
 305 310

<210> 190
 <211> 314
 <212> PRT
 <213> Homo sapiens

 <400> 190

Met Gly Arg Cys Arg Ser Val Lys Glu Phe Glu Lys Leu Asn Arg Ile
 1 5 10 15
 Gly Glu Gly Thr Tyr Gly Ile Val Tyr Arg Ala Arg Asp Thr Gln Thr
 20 25 30
 Asp Glu Ile Val Ala Leu Lys Lys Val Arg Met Asp Lys Glu Lys Asp
 35 40 45
 Gly Ile Pro Ile Ser Ser Leu Arg Glu Ile Thr Leu Leu Leu Arg Leu
 50 55 60
 Arg His Pro Asn Ile Val Glu Leu Lys Glu Val Val Val Gly Asn His
 65 70 75 80
 Leu Glu Ser Ile Phe Leu Val Met Gly Tyr Cys Glu Gln Asp Leu Ala
 85 90 95
 Ser Leu Leu Glu Asn Met Pro Thr Pro Phe Ser Glu Ala Gln Val Lys
 100 105 110
 Cys Ile Val Leu Gln Val Leu Arg Gly Leu Gln Tyr Leu His Arg Asn
 115 120 125
 Phe Ile Ile His Arg Asp Leu Lys Val Ser Asn Leu Leu Met Thr Asp
 130 135 140
 Lys Gly Cys Val Lys Thr Ala Asp Phe Gly Leu Ala Arg Ala Tyr Gly
 145 150 155 160
 Val Pro Val Lys Pro Met Thr Pro Lys Val Val Thr Leu Trp Tyr Arg
 165 170 175

Ala Pro Glu Leu Leu Leu Gly Thr Thr Thr Gln Thr Thr Ser Ile Asp
180 185 190

Met Trp Ala Val Gly Cys Ile Leu Ala Glu Leu Leu Ala His Arg Pro
195 200 205

Leu Leu Pro Gly Thr Ser Glu Ile His Gln Ile Asp Leu Ile Val Gln
210 215 220

Leu Leu Gly Thr Pro Ser Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu
225 230 235 240

Pro Leu Val Gly Gln Tyr Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu
245 250 255

Lys His Lys Phe Pro Trp Leu Ser Glu Ala Gly Leu Arg Leu Leu His
260 265 270

Phe Leu Phe Met Tyr Asp Pro Lys Lys Arg Ala Thr Ala Gly Asp Cys
275 280 285

Leu Glu Ser Ser Tyr Phe Lys Glu Lys Pro Leu Arg Leu Pro Ile Ser
290 295 300

Gly Val Cys Glu Gly Cys Arg Glu Pro Gly
305 310

<210> 191
<211> 314
<212> PRT
<213> Homo sapiens

<400> 191

Met Gly Arg Cys Arg Ser Val Lys Glu Phe Glu Lys Leu Asn Arg Ile
1 5 10 15

Gly Glu Gly Thr Tyr Gly Ile Val Tyr Arg Ala Arg Asp Thr Gln Thr
20 25 30

Asp Glu Ile Val Ala Leu Lys Lys Val Arg Met Asp Lys Glu Lys Asp
35 40 45

Gly Ile Pro Ile Ser Ser Leu Arg Glu Ile Thr Leu Leu Leu Arg Leu
50 55 60

Arg His Pro Asn Ile Val Glu Leu Lys Glu Val Val Val Gly Asn His
65 70 75 80

Leu Glu Ser Ile Phe Leu Val Met Gly Tyr Cys Glu Gln Asp Leu Ala
85 90 95

Ser Leu Leu Glu Asn Met Pro Thr Pro Phe Ser Glu Ala Gln Val Lys
100 105 110

Cys Ile Val Leu Gln Val Leu Arg Gly Leu Gln Tyr Leu His Arg Asn
115 120 125

Phe Ile Ile His Arg Asp Leu Lys Val Ser Asn Leu Leu Met Thr Asp
 130 135 140

Lys Gly Cys Val Lys Thr Ala Asp Phe Gly Leu Ala Arg Ala Tyr Gly
 145 150 155 160

Val Pro Val Lys Pro Met Thr Pro Lys Val Val Thr Leu Trp Tyr Arg
 165 170 175

Ala Pro Glu Leu Leu Leu Gly Thr Thr Thr Gln Thr Thr Ser Ile Asp
 180 185 190

Met Trp Ala Val Gly Cys Ile Leu Ala Glu Leu Leu Ala His Arg Pro
 195 200 205

Leu Leu Pro Gly Thr Ser Glu Ile His Gln Ile Asp Leu Ile Val Gln
 210 215 220

Leu Leu Gly Thr Pro Ser Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu
 225 230 235 240

Pro Leu Val Gly Gln Tyr Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu
 245 250 255

Lys His Lys Phe Pro Trp Leu Ser Glu Ala Gly Leu Arg Leu Leu His
 260 265 270

Phe Leu Phe Met Tyr Asp Pro Lys Lys Arg Ala Thr Ala Gly Asp Cys
 275 280 285

Leu Glu Ser Ser Tyr Phe Lys Glu Lys Pro Leu Arg Leu Pro Ile Ser
 290 295 300

Gly Val Cys Glu Gly Cys Arg Glu Pro Gly
 305 310

<210> 192

<211> 887

<212> PRT

<213> Homo sapiens

<400> 192

Met Gly Glu Ala Glu Lys Phe His Tyr Ile Tyr Ser Cys Asp Leu Asp
 1 5 10 15

Ile Asn Val Gln Leu Lys Ile Gly Ser Leu Glu Gly Lys Arg Glu Gln
 20 25 30

Lys Ser Tyr Asn Ala Val Leu Glu Asp Pro Met Leu Lys Phe Ser Gly
 35 40 45

Leu Tyr Gln Glu Thr Cys Ser Asp Leu Tyr Val Thr Cys Gln Val Phe
 50 55 60

Ala Glu Gly Lys Pro Ser Ala Leu Pro Val Arg Thr Ser Tyr Lys Ala

65					70						75				80
Phe	Ser	Thr	Arg	Trp	Asn	Trp	Asn	Glu	Trp	Leu	Lys	Leu	Pro	Val	Lys
				85					90					95	
Tyr	Pro	Asp	Leu	Pro	Arg	Asn	Ala	Gln	Val	Ala	Leu	Thr	Ile	Trp	Asp
			100					105					110		
Val	Tyr	Gly	Pro	Gly	Lys	Ala	Val	Pro	Val	Gly	Gly	Thr	Thr	Val	Ser
		115					120					125			
Leu	Phe	Gly	Lys	Tyr	Gly	Met	Ser	Arg	Gln	Gly	Met	His	Asp	Leu	Lys
	130					135					140				
Val	Trp	Pro	Asn	Val	Glu	Ala	Asp	Gly	Ser	Glu	Pro	Thr	Asn	Thr	Pro
145					150					155					160
Gly	Arg	Thr	Ser	Ser	Thr	Leu	Ser	Glu	Asp	Gln	Met	Ser	Arg	Leu	Ala
				165					170					175	
Lys	Leu	Thr	Lys	Ala	His	Arg	Gln	Gly	His	Met	Val	Lys	Val	Asp	Trp
			180					185					190		
Leu	Asp	Arg	Leu	Thr	Phe	Arg	Glu	Ile	Glu	Met	Ile	Asn	Glu	Ser	Val
		195					200					205			
Lys	Arg	Ser	Ser	Asn	Phe	Met	Tyr	Leu	Met	Gly	Gly	Phe	Arg	Cys	Val
	210					215					220				
Lys	Cys	Asp	Asp	Lys	Glu	Tyr	Gly	Ile	Val	Tyr	Tyr	Glu	Lys	Asp	Gly
225					230					235				240	
Asp	Glu	Ser	Ser	Pro	Ile	Leu	Thr	Ser	Phe	Glu	Leu	Val	Lys	Val	Pro
				245					250					255	
Asp	Pro	Gln	Met	Ser	Leu	Glu	Asn	Leu	Val	Glu	Ser	Lys	His	His	Asn
			260					265					270		
Leu	Pro	Arg	Ser	Leu	Arg	Ser	Gly	Pro	Ser	Asp	His	Asp	Leu	Lys	Pro
		275					280					285			
Tyr	Pro	Ser	Pro	Arg	Asp	Gln	Leu	Lys	Asn	Ile	Val	Ser	Tyr	Pro	Pro
	290					295					300				
Ser	Lys	Pro	Pro	Thr	Tyr	Glu	Glu	Gln	Asp	Leu	Val	Trp	Glu	Phe	Arg
305					310					315				320	
Tyr	Tyr	Leu	Thr	Asn	Gln	Asp	Lys	Ala	Leu	Thr	Lys	Ile	Leu	Thr	Ser
				325					330					335	
Val	Ile	Trp	Asp	Leu	Pro	Gln	Gly	Ala	Lys	Gln	Ala	Leu	Ala	Leu	Leu
			340					345					350		
Gly	Lys	Trp	Asn	Pro	Met	Asp	Val	Glu	Asp	Ser	Leu	Glu	Leu	Ile	Ser
		355					360					365			
Ser	His	Tyr	Thr	Asn	Pro	Thr	Val	Arg	Arg	Tyr	Ala	Val	Ala	Arg	Leu

370	375	380
Arg Gln Ala Asp Asp Glu Asp Leu Leu Met Tyr Leu Ser Gln Leu Val 385 390 395 400		
Gln Ala Leu Lys Tyr Glu Asn Phe Asp Asp Ile Lys Asn Gly Leu Glu 405 410 415		
Pro Thr Lys Lys Asp Ser Gln Ser Ser Val Ser Gly Asn Val Ser Asn 420 425 430		
Ser Gly Ile Asn Ser Ala Glu Ile Asp Ser Ser Gln Ile Ile Thr Ser 435 440 445		
Pro Leu Pro Ser Val Ser Ser Pro Pro Pro Ala Ser Lys Thr Lys Glu 450 455 460		
Val Pro Asp Gly Glu Asn Leu Glu Gln Asp Leu Cys Thr Phe Leu Ile 465 470 475 480		
Ser Arg Ala Ser Lys Asn Ser Thr Leu Ala Asn Tyr Leu Tyr Trp Tyr 485 490 495		
Val Ile Val Glu Cys Glu Asp Gln Asp Thr Gln Gln Arg Asp Pro Lys 500 505 510		
Thr His Glu Met Tyr Leu Asn Val Met Arg Arg Phe Ser Gln Ala Leu 515 520 525		
Leu Lys Gly Asp Lys Ser Val Arg Val Met Arg Ser Leu Leu Ala Ala 530 535 540		
Gln Gln Thr Phe Val Asp Arg Leu Val His Leu Met Lys Ala Val Gln 545 550 555 560		
Arg Glu Ser Gly Asn Arg Lys Lys Lys Asn Glu Arg Leu Gln Ala Leu 565 570 575		
Leu Gly Asp Asn Glu Lys Met Asn Leu Ser Asp Val Glu Leu Ile Pro 580 585 590		
Leu Pro Leu Glu Pro Gln Val Lys Ile Arg Gly Ile Ile Pro Glu Thr 595 600 605		
Ala Thr Leu Phe Lys Ser Ala Leu Met Pro Ala Gln Leu Phe Phe Lys 610 615 620		
Thr Glu Asp Gly Gly Lys Tyr Pro Val Ile Phe Lys His Gly Asp Asp 625 630 635 640		
Leu Arg Gln Asp Gln Leu Ile Leu Gln Ile Ile Ser Leu Met Asp Lys 645 650 655		
Leu Leu Arg Lys Glu Asn Leu Asp Leu Lys Leu Thr Pro Tyr Lys Val 660 665 670		
Leu Ala Thr Ser Thr Lys His Gly Phe Met Gln Phe Ile Gln Ser Val		

675					680					685						
Pro	Val	Ala	Glu	Val	Leu	Asp	Thr	Glu	Gly	Ser	Ile	Gln	Asn	Phe	Phe	
690					695					700						
Arg	Lys	Tyr	Ala	Pro	Ser	Glu	Asn	Gly	Pro	Asn	Gly	Ile	Ser	Ala	Glu	
705					710					715					720	
Val	Met	Asp	Thr	Tyr	Val	Lys	Ser	Cys	Ala	Gly	Tyr	Cys	Val	Ile	Thr	
					725					730					735	
Tyr	Ile	Leu	Gly	Val	Gly	Asp	Arg	His	Leu	Asp	Asn	Leu	Val	Leu	Thr	
					740					745					750	
Lys	Thr	Gly	Lys	Leu	Phe	His	Ile	Asp	Phe	Gly	Tyr	Ile	Leu	Gly	Arg	
					755					760					765	
Asp	Pro	Lys	Pro	Leu	Pro	Pro	Pro	Met	Lys	Leu	Asn	Lys	Glu	Met	Val	
					770					775					780	
Glu	Gly	Met	Gly	Gly	Thr	Gln	Ser	Glu	Gln	Tyr	Gln	Glu	Phe	Arg	Lys	
785					790					795					800	
Gln	Cys	Tyr	Thr	Ala	Phe	Leu	His	Leu	Arg	Arg	Tyr	Ser	Asn	Leu	Ile	
					805					810					815	
Leu	Asn	Leu	Phe	Ser	Leu	Met	Val	Asp	Pro	Asn	Ile	Pro	Asp	Ile	Ala	
					820					825					830	
Leu	Glu	Pro	Asp	Lys	Thr	Val	Lys	Lys	Val	Gln	Asp	Lys	Phe	Arg	Leu	
835					840					845						
Asp	Leu	Ser	Asp	Glu	Glu	Ala	Val	His	Tyr	Met	Gln	Ser	Leu	Ile	Asp	
850					855					860						
Glu	Ser	Val	His	Ala	Leu	Phe	Ala	Ala	Val	Val	Glu	Gln	Ile	His	Lys	
865					870					875					880	
Phe	Ala	Gln	Tyr	Trp	Arg	Lys										
					885											

<210> 193
 <211> 887
 <212> PRT
 <213> Homo sapiens

<400> 193

Met	Gly	Glu	Ala	Glu	Lys	Phe	His	Tyr	Ile	Tyr	Ser	Cys	Asp	Leu	Asp
1				5					10					15	
Ile	Asn	Val	Gln	Leu	Lys	Ile	Gly	Ser	Leu	Glu	Gly	Lys	Arg	Glu	Gln
			20					25					30		
Lys	Ser	Tyr	Asn	Ala	Val	Leu	Glu	Asp	Pro	Met	Leu	Lys	Phe	Ser	Gly
			35				40					45			

Leu	Tyr	Gln	Glu	Thr	Cys	Ser	Asp	Leu	Tyr	Val	Thr	Cys	Gln	Val	Phe
50						55					60				
Ala	Glu	Gly	Lys	Pro	Ser	Ala	Leu	Pro	Val	Arg	Thr	Ser	Tyr	Lys	Ala
65					70					75					80
Phe	Ser	Thr	Arg	Trp	Asn	Trp	Asn	Glu	Trp	Leu	Lys	Leu	Pro	Val	Lys
				85					90					95	
Tyr	Pro	Asp	Leu	Pro	Arg	Asn	Ala	Gln	Val	Ala	Leu	Thr	Ile	Trp	Asp
			100					105					110		
Val	Tyr	Gly	Pro	Gly	Lys	Ala	Val	Pro	Val	Gly	Gly	Thr	Thr	Val	Ser
		115					120					125			
Leu	Phe	Gly	Lys	Tyr	Gly	Met	Ser	Arg	Gln	Gly	Met	His	Asp	Leu	Lys
130						135					140				
Val	Trp	Pro	Asn	Val	Glu	Ala	Asp	Gly	Ser	Glu	Pro	Thr	Asn	Thr	Pro
145					150					155					160
Gly	Arg	Thr	Ser	Ser	Thr	Leu	Ser	Glu	Asp	Gln	Met	Ser	Arg	Leu	Ala
				165					170					175	
Lys	Leu	Thr	Lys	Ala	His	Arg	Gln	Gly	His	Met	Val	Lys	Val	Asp	Trp
			180					185					190		
Leu	Asp	Arg	Leu	Thr	Phe	Arg	Glu	Ile	Glu	Met	Ile	Asn	Glu	Ser	Val
		195					200					205			
Lys	Arg	Ser	Ser	Asn	Phe	Met	Tyr	Leu	Met	Gly	Gly	Phe	Arg	Cys	Val
	210					215					220				
Lys	Cys	Asp	Asp	Lys	Glu	Tyr	Gly	Ile	Val	Tyr	Tyr	Glu	Lys	Asp	Gly
225					230					235					240
Asp	Glu	Ser	Ser	Pro	Ile	Leu	Thr	Ser	Phe	Glu	Leu	Val	Lys	Val	Pro
				245					250					255	
Asp	Pro	Gln	Met	Ser	Leu	Glu	Asn	Leu	Val	Glu	Ser	Lys	His	His	Asn
			260					265					270		
Leu	Pro	Arg	Ser	Leu	Arg	Ser	Gly	Pro	Ser	Asp	His	Asp	Leu	Lys	Pro
		275					280					285			
Tyr	Pro	Ser	Pro	Arg	Asp	Gln	Leu	Lys	Asn	Ile	Val	Ser	Tyr	Pro	Pro
	290					295					300				
Ser	Lys	Pro	Pro	Thr	Tyr	Glu	Glu	Gln	Asp	Leu	Val	Trp	Glu	Phe	Arg
305					310					315					320
Tyr	Tyr	Leu	Thr	Asn	Gln	Asp	Lys	Ala	Leu	Thr	Lys	Ile	Leu	Thr	Ser
				325					330					335	
Val	Ile	Trp	Asp	Leu	Pro	Gln	Gly	Ala	Lys	Gln	Ala	Leu	Ala	Leu	Leu
			340					345					350		

Gly	Lys	Trp	Asn	Pro	Met	Asp	Val	Glu	Asp	Ser	Leu	Glu	Leu	Ile	Ser	355	360	365	
Ser	His	Tyr	Thr	Asn	Pro	Thr	Val	Arg	Arg	Tyr	Ala	Val	Ala	Arg	Leu	370	375	380	
Arg	Gln	Ala	Asp	Asp	Glu	Asp	Leu	Leu	Met	Tyr	Leu	Ser	Gln	Leu	Val	385	390	395	400
Gln	Ala	Leu	Lys	Tyr	Glu	Asn	Phe	Asp	Asp	Ile	Lys	Asn	Gly	Leu	Glu	405	410	415	
Pro	Thr	Lys	Lys	Asp	Ser	Gln	Ser	Ser	Val	Ser	Gly	Asn	Val	Ser	Asn	420	425	430	
Ser	Gly	Ile	Asn	Ser	Ala	Glu	Ile	Asp	Ser	Ser	Gln	Ile	Ile	Thr	Ser	435	440	445	
Pro	Leu	Pro	Ser	Val	Ser	Ser	Pro	Pro	Pro	Ala	Ser	Lys	Thr	Lys	Glu	450	455	460	
Val	Pro	Asp	Gly	Glu	Asn	Leu	Glu	Gln	Asp	Leu	Cys	Thr	Phe	Leu	Ile	465	470	475	480
Ser	Arg	Ala	Ser	Lys	Asn	Ser	Thr	Leu	Ala	Asn	Tyr	Leu	Tyr	Trp	Tyr	485	490	495	
Val	Ile	Val	Glu	Cys	Glu	Asp	Gln	Asp	Thr	Gln	Gln	Arg	Asp	Pro	Lys	500	505	510	
Thr	His	Glu	Met	Tyr	Leu	Asn	Val	Met	Arg	Arg	Phe	Ser	Gln	Ala	Leu	515	520	525	
Leu	Lys	Gly	Asp	Lys	Ser	Val	Arg	Val	Met	Arg	Ser	Leu	Leu	Ala	Ala	530	535	540	
Gln	Gln	Thr	Phe	Val	Asp	Arg	Leu	Val	His	Leu	Met	Lys	Ala	Val	Gln	545	550	555	560
Arg	Glu	Ser	Gly	Asn	Arg	Lys	Lys	Lys	Asn	Glu	Arg	Leu	Gln	Ala	Leu	565	570	575	
Leu	Gly	Asp	Asn	Glu	Lys	Met	Asn	Leu	Ser	Asp	Val	Glu	Leu	Ile	Pro	580	585	590	
Leu	Pro	Leu	Glu	Pro	Gln	Val	Lys	Ile	Arg	Gly	Ile	Ile	Pro	Glu	Thr	595	600	605	
Ala	Thr	Leu	Phe	Lys	Ser	Ala	Leu	Met	Pro	Ala	Gln	Leu	Phe	Phe	Lys	610	615	620	
Thr	Glu	Asp	Gly	Gly	Lys	Tyr	Pro	Val	Ile	Phe	Lys	His	Gly	Asp	Asp	625	630	635	640
Leu	Arg	Gln	Asp	Gln	Leu	Ile	Leu	Gln	Ile	Ile	Ser	Leu	Met	Asp	Lys	645	650	655	

Leu Leu Arg Lys Glu Asn Leu Asp Leu Lys Leu Thr Pro Tyr Lys Val
660 665 670

Leu Ala Thr Ser Thr Lys His Gly Phe Met Gln Phe Ile Gln Ser Val
675 680 685

Pro Val Ala Glu Val Leu Asp Thr Glu Gly Ser Ile Gln Asn Phe Phe
690 695 700

Arg Lys Tyr Ala Pro Ser Glu Asn Gly Pro Asn Gly Ile Ser Ala Glu
705 710 715 720

Val Met Asp Thr Tyr Val Lys Ser Cys Ala Gly Tyr Cys Val Ile Thr
725 730 735

Tyr Ile Leu Gly Val Gly Asp Arg His Leu Asp Asn Leu Val Leu Thr
740 745 750

Lys Thr Gly Lys Leu Phe His Ile Asp Phe Gly Tyr Ile Leu Gly Arg
755 760 765

Asp Pro Lys Pro Leu Pro Pro Pro Met Lys Leu Asn Lys Glu Met Val
770 775 780

Glu Gly Met Gly Gly Thr Gln Ser Glu Gln Tyr Gln Glu Phe Arg Lys
785 790 795 800

Gln Cys Tyr Thr Ala Phe Leu His Leu Arg Arg Tyr Ser Asn Leu Ile
805 810 815

Leu Asn Leu Phe Ser Leu Met Val Asp Pro Asn Ile Pro Asp Ile Ala
820 825 830

Leu Glu Pro Asp Lys Thr Val Lys Lys Val Gln Asp Lys Phe Arg Leu
835 840 845

Asp Leu Ser Asp Glu Glu Ala Val His Tyr Met Gln Ser Leu Ile Asp
850 855 860

Glu Ser Val His Ala Leu Phe Ala Ala Val Val Glu Gln Ile His Lys
865 870 875 880

Phe Ala Gln Tyr Trp Arg Lys
885

<210> 194

<211> 351

<212> PRT

<213> Homo sapiens

<400> 194

Met Gly Asn Ala Ala Ala Ala Lys Lys Gly Ser Glu Gln Glu Ser Val
1 5 10 15

Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys Lys Trp Glu
20 25 30

Ser	Pro	Ala	Gln	Asn	Thr	Ala	His	Leu	Asp	Gln	Phe	Glu	Arg	Ile	Lys	35	40	45	
Thr	Leu	Gly	Thr	Gly	Ser	Phe	Gly	Arg	Val	Met	Leu	Val	Lys	His	Lys	50	55	60	
Glu	Thr	Gly	Asn	His	Tyr	Ala	Met	Lys	Ile	Leu	Asp	Lys	Gln	Lys	Val	65	70	75	80
Val	Lys	Leu	Lys	Gln	Ile	Glu	His	Thr	Leu	Asn	Glu	Lys	Arg	Ile	Leu	85	90	95	
Gln	Ala	Val	Asn	Phe	Pro	Phe	Leu	Val	Lys	Leu	Glu	Phe	Ser	Phe	Lys	100	105	110	
Asp	Asn	Ser	Asn	Leu	Tyr	Met	Val	Met	Glu	Tyr	Val	Pro	Gly	Gly	Glu	115	120	125	
Met	Phe	Ser	His	Leu	Arg	Arg	Ile	Gly	Arg	Phe	Ser	Glu	Pro	His	Ala	130	135	140	
Arg	Phe	Tyr	Ala	Ala	Gln	Ile	Val	Leu	Thr	Phe	Glu	Tyr	Leu	His	Ser	145	150	155	160
Leu	Asp	Leu	Ile	Tyr	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Ile	Asp	165	170	175	
Gln	Gln	Gly	Tyr	Ile	Gln	Val	Thr	Asp	Phe	Gly	Phe	Ala	Lys	Arg	Val	180	185	190	
Lys	Gly	Arg	Thr	Trp	Thr	Leu	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	195	200	205	
Glu	Ile	Ile	Leu	Ser	Lys	Gly	Tyr	Asn	Lys	Ala	Val	Asp	Trp	Trp	Ala	210	215	220	
Leu	Gly	Val	Leu	Ile	Tyr	Glu	Met	Ala	Ala	Gly	Tyr	Pro	Pro	Phe	Phe	225	230	235	240
Ala	Asp	Gln	Pro	Ile	Gln	Ile	Tyr	Glu	Lys	Ile	Val	Ser	Gly	Lys	Val	245	250	255	
Arg	Phe	Pro	Ser	His	Phe	Ser	Ser	Asp	Leu	Lys	Asp	Leu	Leu	Arg	Asn	260	265	270	
Leu	Leu	Gln	Val	Asp	Leu	Thr	Lys	Arg	Phe	Gly	Asn	Leu	Lys	Asn	Gly	275	280	285	
Val	Asn	Asp	Ile	Lys	Asn	His	Lys	Trp	Phe	Ala	Thr	Thr	Asp	Trp	Ile	290	295	300	
Ala	Ile	Tyr	Gln	Arg	Lys	Val	Glu	Ala	Pro	Phe	Ile	Pro	Lys	Phe	Lys	305	310	315	320
Gly	Pro	Gly	Asp	Thr	Ser	Asn	Phe	Asp	Asp	Tyr	Glu	Glu	Glu	Glu	Ile	325	330	335	

Arg Val Ser Ile Asn Glu Lys Cys Gly Lys Glu Phe Ser Glu Phe
 340 345 350

<210> 195
 <211> 737
 <212> PRT
 <213> Homo sapiens

<400> 195

Met Val Val Phe Asn Gly Leu Leu Lys Ile Lys Ile Cys Glu Ala Val
 1 5 10 15

Ser Leu Lys Pro Thr Ala Trp Ser Leu Arg His Ala Val Gly Pro Arg
 20 25 30

Pro Gln Thr Phe Leu Leu Asp Pro Tyr Ile Ala Leu Asn Val Asp Asp
 35 40 45

Ser Arg Ile Gly Gln Thr Ala Thr Lys Gln Lys Thr Asn Ser Pro Ala
 50 55 60

Trp His Asp Glu Phe Val Thr Asp Val Cys Asn Gly Arg Lys Ile Glu
 65 70 75 80

Leu Ala Val Phe His Asp Ala Pro Ile Gly Tyr Asp Asp Phe Val Ala
 85 90 95

Asn Cys Thr Ile Gln Phe Glu Glu Leu Leu Gln Asn Gly Ser Arg His
 100 105 110

Phe Glu Asp Trp Ile Asp Leu Glu Pro Glu Gly Arg Val Tyr Val Ile
 115 120 125

Ile Asp Leu Ser Gly Ser Ser Gly Glu Ala Pro Lys Asp Asn Glu Glu
 130 135 140

Arg Val Phe Arg Glu Arg Met Arg Pro Arg Lys Arg Gln Gly Ala Val
 145 150 155 160

Arg Arg Arg Val His Gln Val Asn Gly His Lys Phe Met Ala Thr Tyr
 165 170 175

Leu Arg Gln Pro Thr Tyr Cys Ser His Cys Arg Asp Phe Ile Trp Gly
 180 185 190

Val Ile Gly Lys Gln Gly Tyr Gln Cys Gln Val Cys Thr Cys Val Val
 195 200 205

His Lys Arg Cys His Glu Leu Ile Ile Thr Lys Cys Ala Gly Leu Lys
 210 215 220

Lys Gln Glu Thr Pro Asp Gln Val Gly Ser Gln Arg Phe Ser Val Asn
 225 230 235 240

Met Pro His Lys Phe Gly Ile His Asn Tyr Lys Val Pro Thr Phe Cys

245								250				255				
Asp	His	Cys	Gly	Ser	Leu	Leu	Trp	Gly	Leu	Leu	Arg	Gln	Gly	Leu	Gln	
			260					265				270				
Cys	Lys	Val	Cys	Lys	Met	Asn	Val	His	Arg	Arg	Cys	Glu	Thr	Asn	Val	
			275				280				285					
Ala	Pro	Asn	Cys	Gly	Val	Asp	Ala	Arg	Gly	Ile	Ala	Lys	Val	Leu	Ala	
			290				295				300					
Asp	Leu	Gly	Val	Thr	Pro	Asp	Lys	Ile	Thr	Asn	Ser	Gly	Gln	Arg	Arg	
305				310						315				320		
Lys	Lys	Leu	Ile	Ala	Gly	Ala	Glu	Ser	Pro	Gln	Pro	Ala	Ser	Gly	Ser	
			325				330						335			
Ser	Pro	Ser	Glu	Glu	Asp	Arg	Ser	Lys	Ser	Ala	Pro	Thr	Ser	Pro	Cys	
			340				345						350			
Asp	Gln	Glu	Ile	Lys	Glu	Leu	Glu	Asn	Asn	Ile	Arg	Lys	Ala	Leu	Ser	
			355				360				365					
Phe	Asp	Asn	Arg	Gly	Glu	Glu	His	Arg	Ala	Ala	Ser	Ser	Pro	Asp	Gly	
			370				375				380					
Gln	Leu	Met	Ser	Pro	Gly	Glu	Asn	Gly	Glu	Val	Arg	Gln	Gly	Gln	Ala	
385				390						395			400			
Lys	Arg	Leu	Gly	Leu	Asp	Glu	Phe	Asn	Phe	Ile	Lys	Val	Leu	Gly	Lys	
			405				410						415			
Gly	Ser	Phe	Gly	Lys	Val	Met	Leu	Ala	Glu	Leu	Lys	Gly	Lys	Asp	Glu	
			420				425						430			
Val	Tyr	Ala	Val	Lys	Val	Leu	Lys	Lys	Asp	Val	Ile	Leu	Gln	Asp	Asp	
			435				440						445			
Asp	Val	Asp	Cys	Thr	Met	Thr	Glu	Lys	Arg	Ile	Leu	Ala	Leu	Ala	Arg	
			450				455				460					
Lys	His	Pro	Tyr	Leu	Thr	Gln	Leu	Tyr	Cys	Cys	Phe	Gln	Thr	Lys	Asp	
465				470						475			480			
Arg	Leu	Phe	Phe	Val	Met	Glu	Tyr	Val	Asn	Gly	Gly	Asp	Leu	Met	Phe	
			485				490						495			
Gln	Ile	Gln	Arg	Ser	Arg	Lys	Phe	Asp	Glu	Pro	Arg	Ser	Arg	Phe	Tyr	
			500				505						510			
Ala	Ala	Glu	Val	Thr	Ser	Ala	Leu	Met	Phe	Leu	His	Gln	His	Gly	Val	
			515				520						525			
Ile	Tyr	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Ile	Leu	Leu	Asp	Ala	Glu	Gly	
			530				535				540					
His	Cys	Lys	Leu	Ala	Asp	Phe	Gly	Met	Cys	Lys	Glu	Gly	Ile	Leu	Asn	

545		550		555		560
Gly Val Thr Thr Thr Thr Phe Cys Gly Thr Pro Asp Tyr Ile Ala Pro						
		565		570		575
Glu Ile Leu Gln Glu Leu Glu Tyr Gly Pro Ser Val Asp Trp Trp Ala						
		580		585		590
Leu Gly Val Leu Met Tyr Glu Met Met Ala Gly Gln Pro Pro Phe Glu						
		595		600		605
Ala Asp Asn Glu Asp Asp Leu Phe Glu Ser Ile Leu His Asp Asp Val						
		610		615		620
Leu Tyr Pro Val Trp Leu Ser Lys Glu Ala Val Ser Ile Leu Lys Ala						
		625		630		635
Phe Met Thr Lys Asn Pro His Lys Arg Leu Gly Cys Val Ala Ser Gln						
		645		650		655
Asn Gly Glu Asp Ala Ile Lys Gln His Pro Phe Phe Lys Glu Ile Asp						
		660		665		670
Trp Val Leu Leu Glu Gln Lys Lys Ile Lys Pro Pro Phe Lys Pro Arg						
		675		680		685
Ile Lys Thr Lys Arg Asp Val Asn Asn Phe Asp Gln Asp Phe Thr Arg						
		690		695		700
Glu Glu Pro Val Leu Thr Leu Val Asp Glu Ala Ile Val Lys Gln Ile						
		705		710		715
Asn Gln Glu Glu Phe Lys Gly Phe Ser Tyr Phe Gly Glu Asp Leu Met						
		725		730		735

Pro

<210> 196
 <211> 855
 <212> PRT
 <213> Homo sapiens

<400> 196

Met Ile Leu Ile Pro Arg Met Leu Leu Val Leu Phe Leu Leu Leu Pro														
1			5				10					15		
Ile Leu Ser Ser Ala Lys Ala Gln Val Asn Pro Ala Ile Cys Arg Tyr														
			20				25					30		
Pro Leu Gly Met Ser Gly Gly Gln Ile Pro Asp Glu Asp Ile Thr Ala														
			35				40					45		
Ser Ser Gln Trp Ser Glu Ser Thr Ala Ala Lys Tyr Gly Arg Leu Asp														
			50				55					60		

Ser Glu Glu Gly Asp Gly Ala Trp Cys Pro Glu Ile Pro Val Glu Pro
 65 70 75 80
 Asp Asp Leu Lys Glu Phe Leu Gln Ile Asp Leu His Thr Leu His Phe
 85 90 95
 Ile Thr Leu Val Gly Thr Gln Gly Arg His Ala Gly Gly His Gly Ile
 100 105 110
 Glu Phe Ala Pro Met Tyr Lys Ile Asn Tyr Ser Arg Asp Gly Thr Arg
 115 120 125
 Trp Ile Ser Trp Arg Asn Arg His Gly Lys Gln Val Leu Asp Gly Asn
 130 135 140
 Ser Asn Pro Tyr Asp Ile Phe Leu Lys Asp Leu Glu Pro Pro Ile Val
 145 150 155 160
 Ala Arg Phe Val Arg Phe Ile Pro Val Thr Asp His Ser Met Asn Val
 165 170 175
 Cys Met Arg Val Glu Leu Tyr Gly Cys Val Trp Leu Asp Gly Leu Val
 180 185 190
 Ser Tyr Asn Ala Pro Ala Gly Gln Gln Phe Val Leu Pro Gly Gly Ser
 195 200 205
 Ile Ile Tyr Leu Asn Asp Ser Val Tyr Asp Gly Ala Val Gly Tyr Ser
 210 215 220
 Met Thr Glu Gly Leu Gly Gln Leu Thr Asp Gly Val Ser Gly Leu Asp
 225 230 235 240
 Asp Phe Thr Gln Thr His Glu Tyr His Val Trp Pro Gly Tyr Asp Tyr
 245 250 255
 Val Gly Trp Arg Asn Glu Ser Ala Thr Asn Gly Tyr Ile Glu Ile Met
 260 265 270
 Phe Glu Phe Asp Arg Ile Arg Asn Phe Thr Thr Met Lys Val His Cys
 275 280 285
 Asn Asn Met Phe Ala Lys Gly Val Lys Ile Phe Lys Glu Val Gln Cys
 290 295 300
 Tyr Phe Arg Ser Glu Ala Ser Glu Trp Glu Pro Asn Ala Ile Ser Phe
 305 310 315 320
 Pro Leu Val Leu Asp Asp Val Asn Pro Ser Ala Arg Phe Val Thr Val
 325 330 335
 Pro Leu His His Arg Met Ala Ser Ala Ile Lys Cys Gln Tyr His Phe
 340 345 350
 Ala Asp Thr Trp Met Met Phe Ser Glu Ile Thr Phe Gln Ser Asp Ala
 355 360 365

Ala Met Tyr Asn Asn Ser Glu Ala Leu Pro Thr Ser Pro Met Ala Pro	370	375	380
Thr Thr Tyr Asp Pro Met Leu Lys Val Asp Asp Ser Asn Thr Arg Ile	385	390	395 400
Leu Ile Gly Cys Leu Val Ala Ile Ile Phe Ile Leu Leu Ala Ile Ile	405	410	415
Val Ile Ile Leu Trp Arg Gln Phe Trp Gln Lys Met Leu Glu Lys Ala	420	425	430
Ser Arg Arg Met Leu Asp Asp Glu Met Thr Val Ser Leu Ser Leu Pro	435	440	445
Ser Asp Ser Ser Met Phe Asn Asn Asn Arg Ser Ser Ser Pro Ser Glu	450	455	460
Gln Gly Ser Asn Ser Thr Tyr Asp Arg Ile Phe Pro Leu Arg Pro Asp	465	470	475 480
Tyr Gln Glu Pro Ser Arg Leu Ile Arg Lys Leu Pro Glu Phe Ala Pro	485	490	495
Gly Glu Glu Glu Ser Gly Cys Ser Gly Val Val Lys Pro Val Gln Pro	500	505	510
Ser Gly Pro Glu Gly Val Pro His Tyr Ala Glu Ala Asp Ile Val Asn	515	520	525
Leu Gln Gly Val Thr Gly Gly Asn Thr Tyr Ser Val Pro Ala Val Thr	530	535	540
Met Asp Leu Leu Ser Gly Lys Asp Val Ala Val Glu Glu Phe Pro Arg	545	550	555 560
Lys Leu Leu Thr Phe Lys Glu Lys Leu Gly Glu Gly Gln Phe Gly Glu	565	570	575
Val His Leu Cys Glu Val Glu Gly Met Glu Lys Phe Lys Asp Lys Asp	580	585	590
Phe Ala Leu Asp Val Ser Ala Asn Gln Pro Val Leu Val Ala Val Lys	595	600	605
Met Leu Arg Ala Asp Ala Asn Lys Asn Ala Arg Asn Asp Phe Leu Lys	610	615	620
Glu Ile Lys Ile Met Ser Arg Leu Lys Asp Pro Asn Ile Ile His Leu	625	630	635 640
Leu Ser Val Cys Ile Thr Asp Asp Pro Leu Cys Met Ile Thr Glu Tyr	645	650	655
Met Glu Asn Gly Asp Leu Asn Gln Phe Leu Ser Arg His Glu Pro Pro	660	665	670

Asn Ser Ser Ser Ser Asp Val Arg Thr Val Ser Tyr Thr Asn Leu Lys
675 680 685

Phe Met Ala Thr Gln Ile Ala Ser Gly Met Lys Tyr Leu Ser Ser Leu
690 695 700

Asn Phe Val His Arg Asp Leu Ala Thr Arg Asn Cys Leu Val Gly Lys
705 710 715 720

Asn Tyr Thr Ile Lys Ile Ala Asp Phe Gly Met Ser Arg Asn Leu Tyr
725 730 735

Ser Gly Asp Tyr Tyr Arg Ile Gln Gly Arg Ala Val Leu Pro Ile Arg
740 745 750

Trp Met Ser Trp Glu Ser Ile Leu Leu Gly Lys Phe Thr Thr Ala Ser
755 760 765

Asp Val Trp Ala Phe Gly Val Thr Leu Trp Glu Thr Phe Thr Phe Cys
770 775 780

Gln Glu Gln Pro Tyr Ser Gln Leu Ser Asp Glu Gln Val Ile Glu Asn
785 790 795 800

Thr Gly Glu Phe Phe Arg Asp Gln Gly Arg Gln Thr Tyr Leu Pro Gln
805 810 815

Pro Ala Ile Cys Pro Asp Ser Val Tyr Lys Leu Met Leu Ser Cys Trp
820 825 830

Arg Arg Asp Thr Lys Asn Arg Pro Ser Phe Gln Glu Ile His Leu Leu
835 840 845

Leu Leu Gln Gln Gly Asp Glu
850 855

<210> 197

<211> 966

<212> PRT

<213> Homo sapiens

<400> 197

Met Ala Asn Phe Gln Glu His Leu Ser Cys Ser Ser Ser Pro His Leu
1 5 10 15

Pro Phe Ser Glu Ser Lys Thr Phe Asn Gly Leu Gln Asp Glu Leu Thr
20 25 30

Ala Met Gly Asn His Pro Ser Pro Lys Leu Leu Glu Asp Gln Gln Glu
35 40 45

Lys Gly Met Val Arg Thr Glu Leu Ile Glu Ser Val His Ser Pro Val
50 55 60

Thr Thr Thr Val Leu Thr Ser Val Ser Glu Asp Ser Arg Asp Gln Phe
65 70 75 80

Glu	Asn	Ser	Val	Leu	Gln	Leu	Arg	Glu	His	Asp	Glu	Ser	Glu	Thr	Ala	
				85					90					95		
Val	Ser	Gln	Gly	Asn	Ser	Asn	Thr	Val	Asp	Gly	Glu	Ser	Thr	Ser	Gly	
			100					105					110			
Thr	Glu	Asp	Ile	Lys	Ile	Gln	Phe	Ser	Arg	Ser	Gly	Ser	Gly	Ser	Gly	
		115					120					125				
Gly	Phe	Leu	Glu	Gly	Leu	Phe	Gly	Cys	Leu	Arg	Pro	Val	Trp	Asn	Ile	
	130					135					140					
Ile	Gly	Lys	Ala	Tyr	Ser	Thr	Asp	Tyr	Lys	Leu	Gln	Gln	Gln	Asp	Thr	
145					150					155					160	
Trp	Glu	Val	Pro	Phe	Glu	Glu	Ile	Ser	Glu	Leu	Gln	Trp	Leu	Gly	Ser	
				165					170					175		
Gly	Ala	Gln	Gly	Ala	Val	Phe	Leu	Gly	Lys	Phe	Arg	Ala	Glu	Glu	Val	
			180					185					190			
Ala	Ile	Lys	Lys	Val	Arg	Glu	Gln	Asn	Glu	Thr	Asp	Ile	Lys	His	Leu	
		195					200					205				
Arg	Lys	Leu	Lys	His	Pro	Asn	Ile	Ile	Ala	Phe	Lys	Gly	Val	Cys	Thr	
	210					215					220					
Gln	Ala	Pro	Cys	Tyr	Cys	Ile	Ile	Met	Glu	Tyr	Cys	Ala	His	Gly	Gln	
225					230					235					240	
Leu	Tyr	Glu	Val	Leu	Arg	Ala	Gly	Arg	Lys	Ile	Thr	Pro	Arg	Leu	Leu	
				245					250					255		
Val	Asp	Trp	Ser	Thr	Gly	Ile	Ala	Ser	Gly	Met	Asn	Tyr	Leu	His	Leu	
		260						265					270			
His	Lys	Ile	Ile	His	Arg	Asp	Leu	Lys	Ser	Pro	Asn	Val	Leu	Val	Thr	
		275					280					285				
His	Thr	Asp	Ala	Val	Lys	Ile	Ser	Asp	Phe	Gly	Thr	Ser	Lys	Glu	Leu	
	290					295					300					
Ser	Asp	Lys	Ser	Thr	Lys	Met	Ser	Phe	Ala	Gly	Thr	Val	Ala	Trp	Met	
305					310					315				320		
Ala	Pro	Glu	Val	Ile	Arg	Asn	Glu	Pro	Val	Ser	Glu	Lys	Val	Asp	Ile	
				325					330					335		
Trp	Ser	Phe	Gly	Val	Val	Leu	Trp	Glu	Leu	Leu	Thr	Gly	Glu	Ile	Pro	
			340					345					350			
Tyr	Lys	Asp	Val	Asp	Ser	Ser	Ala	Ile	Ile	Trp	Gly	Val	Gly	Ser	Asn	
		355					360					365				
Ser	Leu	His	Leu	Pro	Val	Pro	Ser	Thr	Cys	Pro	Asp	Gly	Phe	Lys	Ile	
	370					375					380					

Leu	Met	Lys	Gln	Thr	Trp	Gln	Ser	Lys	Pro	Arg	Asn	Arg	Pro	Ser	Phe	385	390	395	400
Arg	Gln	Thr	Leu	Met	His	Leu	Asp	Ile	Ala	Ser	Ala	Asp	Val	Leu	Ala	405	410	415	
Thr	Pro	Gln	Glu	Thr	Tyr	Phe	Lys	Ser	Gln	Ala	Glu	Trp	Arg	Glu	Glu	420	425	430	
Val	Lys	Lys	His	Phe	Glu	Lys	Ile	Lys	Ser	Glu	Gly	Thr	Cys	Ile	His	435	440	445	
Arg	Leu	Asp	Glu	Glu	Leu	Ile	Arg	Arg	Arg	Arg	Glu	Glu	Leu	Arg	His	450	455	460	
Ala	Leu	Asp	Ile	Arg	Glu	His	Tyr	Glu	Arg	Lys	Leu	Glu	Arg	Ala	Asn	465	470	475	480
Asn	Leu	Tyr	Met	Glu	Leu	Ser	Ala	Ile	Met	Leu	Gln	Leu	Glu	Met	Arg	485	490	495	
Glu	Lys	Glu	Leu	Ile	Lys	Arg	Glu	Gln	Ala	Val	Glu	Lys	Lys	Tyr	Pro	500	505	510	
Gly	Thr	Tyr	Lys	Arg	His	Pro	Val	Arg	Pro	Ile	Ile	His	Pro	Asn	Ala	515	520	525	
Met	Glu	Lys	Leu	Met	Lys	Arg	Lys	Gly	Val	Pro	His	Lys	Ser	Gly	Met	530	535	540	
Gln	Thr	Lys	Arg	Pro	Asp	Leu	Leu	Arg	Ser	Glu	Gly	Ile	Pro	Thr	Thr	545	550	555	560
Glu	Val	Ala	Pro	Thr	Ala	Ser	Pro	Leu	Ser	Gly	Ser	Pro	Lys	Met	Ser	565	570	575	
Thr	Ser	Ser	Ser	Lys	Ser	Arg	Tyr	Arg	Ser	Lys	Pro	Arg	His	Arg	Arg	580	585	590	
Gly	Asn	Ser	Arg	Gly	Ser	His	Ser	Asp	Phe	Ala	Ala	Ile	Leu	Lys	Asn	595	600	605	
Gln	Pro	Ala	Gln	Glu	Asn	Ser	Pro	His	Pro	Thr	Tyr	Leu	His	Gln	Ala	610	615	620	
Gln	Ser	Gln	Tyr	Pro	Ser	Leu	His	His	His	Asn	Ser	Leu	Gln	Gln	Gln	625	630	635	640
Tyr	Gln	Gln	Pro	Pro	Pro	Ala	Met	Ser	Gln	Ser	His	His	Pro	Arg	Leu	645	650	655	
Asn	Met	His	Gly	Gln	Asp	Ile	Ala	Thr	Cys	Ala	Asn	Asn	Leu	Arg	Tyr	660	665	670	
Phe	Gly	Pro	Ala	Ala	Ala	Leu	Arg	Ser	Pro	Leu	Ser	Asn	His	Ala	Gln	675	680	685	

Arg Gln Leu Pro Gly Ser Ser Pro Asp Leu Ile Ser Thr Ala Met Ala
690 695 700

Ala Asp Cys Trp Arg Ser Ser Glu Pro Asp Lys Gly Gln Ala Gly Pro
705 710 715 720

Trp Gly Cys Cys Gln Ala Asp Ala Tyr Asp Pro Cys Leu Gln Cys Arg
725 730 735

Pro Glu Gln Tyr Gly Ser Leu Asp Ile Pro Ser Ala Glu Pro Val Gly
740 745 750

Arg Ser Pro Asp Leu Ser Lys Ser Pro Ala His Asn Pro Leu Leu Glu
755 760 765

Asn Ala Gln Ser Ser Glu Lys Thr Glu Glu Asn Glu Phe Ser Gly Cys
770 775 780

Arg Ser Glu Ser Ser Leu Gly Thr Ser His Leu Gly Thr Pro Pro Ala
785 790 795 800

Leu Pro Arg Lys Thr Arg Pro Leu Gln Lys Ser Gly Asp Asp Ser Ser
805 810 815

Glu Glu Glu Glu Gly Glu Val Asp Ser Glu Val Glu Phe Pro Arg Arg
820 825 830

Gln Arg Pro His Arg Cys Ile Ser Ser Cys Gln Ser Tyr Ser Thr Phe
835 840 845

Ser Ser Glu Asn Phe Ser Val Ser Asp Gly Glu Glu Gly Asn Thr Ser
850 855 860

Asp His Ser Asn Ser Pro Asp Glu Leu Ala Asp Lys Leu Glu Asp Arg
865 870 875 880

Leu Ala Glu Lys Leu Asp Asp Leu Leu Ser Gln Thr Pro Glu Ile Pro
885 890 895

Ile Asp Ile Ser Ser His Ser Asp Gly Leu Ser Asp Lys Glu Cys Ala
900 905 910

Val Arg Arg Val Lys Thr Gln Met Ser Leu Gly Lys Leu Cys Val Glu
915 920 925

Glu Arg Gly Tyr Glu Asn Pro Met Gln Phe Glu Glu Ser Asp Cys Asp
930 935 940

Ser Ser Asp Gly Glu Cys Ser Asp Ala Thr Val Arg Thr Asn Lys His
945 950 955 960

Tyr Ser Ser Ala Thr Trp
965

<210> 198

<211> 459

<212> PRT
<213> Homo sapiens

<400> 198

Arg	Lys	Glu	Ala	Val	Leu	Ser	Ala	Lys	Met	Lys	His	Pro	Asn	Ile	Val	
1				5					10					15		
Ala	Phe	Lys	Glu	Ser	Phe	Glu	Ala	Glu	Gly	His	Leu	Tyr	Ile	Val	Met	
			20					25					30			
Glu	Tyr	Cys	Asp	Gly	Gly	Asp	Leu	Met	Gln	Lys	Ile	Lys	Gln	Gln	Lys	
		35					40					45				
Gly	Lys	Leu	Phe	Pro	Glu	Asp	Met	Ile	Leu	Asn	Trp	Phe	Thr	Gln	Met	
	50					55					60					
Cys	Leu	Gly	Val	Asn	His	Ile	His	Lys	Lys	Arg	Val	Leu	His	Arg	Asp	
65					70					75					80	
Ile	Lys	Ser	Lys	Asn	Ile	Phe	Leu	Thr	Gln	Asn	Gly	Lys	Val	Lys	Leu	
				85					90					95		
Gly	Asp	Phe	Gly	Ser	Ala	Arg	Leu	Leu	Ser	Asn	Pro	Met	Ala	Phe	Ala	
			100					105						110		
Cys	Thr	Tyr	Val	Gly	Thr	Pro	Tyr	Tyr	Val	Pro	Pro	Glu	Ile	Trp	Glu	
		115					120					125				
Asn	Leu	Pro	Tyr	Asn	Asn	Lys	Ser	Asp	Ile	Trp	Ser	Leu	Gly	Cys	Ile	
	130					135					140					
Leu	Tyr	Glu	Leu	Cys	Thr	Leu	Lys	His	Pro	Phe	Gln	Ala	Asn	Ser	Trp	
145					150					155					160	
Lys	Asn	Leu	Ile	Leu	Lys	Val	Cys	Gln	Gly	Cys	Ile	Ser	Pro	Leu	Pro	
				165					170					175		
Ser	His	Tyr	Ser	Tyr	Glu	Leu	Gln	Phe	Leu	Val	Lys	Gln	Met	Phe	Lys	
		180						185					190			
Arg	Asn	Pro	Ser	His	Arg	Pro	Ser	Ala	Thr	Thr	Leu	Leu	Ser	Arg	Gly	
		195					200					205				
Ile	Val	Ala	Arg	Leu	Val	Gln	Lys	Cys	Leu	Pro	Pro	Glu	Ile	Ile	Met	
	210					215					220					
Glu	Tyr	Gly	Glu	Glu	Val	Leu	Glu	Glu	Ile	Lys	Asn	Ser	Lys	His	Asn	
225					230					235					240	
Thr	Pro	Arg	Lys	Lys	Thr	Asn	Pro	Ser	Arg	Ile	Arg	Ile	Ala	Leu	Gly	
				245					250					255		
Asn	Glu	Ala	Ser	Thr	Val	Gln	Glu	Glu	Gln	Asp	Arg	Lys	Gly	Ser		
			260					265					270			
His	Thr	Asp	Leu	Glu	Ser	Ile	Asn	Glu	Asn	Leu	Val	Glu	Ser	Ala	Leu	

275					280					285						
Arg	Arg	Val	Asn	Arg	Glu	Glu	Lys	Gly	Asn	Lys	Ser	Val	His	Leu	Arg	
290					295					300						
Lys	Ala	Ser	Ser	Pro	Asn	Leu	His	Arg	Arg	Gln	Trp	Glu	Lys	Asn	Val	
305					310					315					320	
Pro	Asn	Thr	Ala	Leu	Thr	Ala	Leu	Glu	Asn	Ala	Ser	Ile	Leu	Thr	Ser	
325					330					335						
Ser	Leu	Thr	Ala	Glu	Asp	Asp	Arg	Gly	Gly	Ser	Val	Ile	Lys	Tyr	Ser	
340					345					350						
Lys	Asn	Thr	Thr	Arg	Lys	Gln	Trp	Leu	Lys	Glu	Thr	Pro	Asp	Thr	Leu	
355					360					365						
Leu	Asn	Ile	Leu	Lys	Asn	Ala	Asp	Leu	Ser	Leu	Ala	Phe	Gln	Thr	Tyr	
370					375					380						
Thr	Ile	Tyr	Arg	Pro	Gly	Ser	Glu	Gly	Phe	Leu	Lys	Gly	Pro	Leu	Ser	
385					390					395					400	
Glu	Glu	Thr	Glu	Ala	Ser	Asp	Ser	Val	Asp	Gly	Gly	His	Asp	Ser	Val	
405					410					415						
Ile	Leu	Asp	Pro	Glu	Arg	Leu	Glu	Pro	Gly	Leu	Asp	Glu	Glu	Asp	Thr	
420					425					430						
Asp	Phe	Glu	Glu	Glu	Asp	Asp	Asn	Pro	Asp	Trp	Val	Ser	Glu	Leu	Lys	
435					440					445						
Lys	Arg	Ala	Gly	Trp	Gln	Gly	Leu	Cys	Asp	Arg						
450					455											

<210> 199
 <211> 1124
 <212> PRT
 <213> Homo sapiens

<400> 199

Met	Ala	Pro	Pro	Ser	Glu	Glu	Thr	Pro	Leu	Ile	Pro	Gln	Arg	Ser	Cys
1				5					10					15	
Ser	Leu	Leu	Ser	Thr	Glu	Ala	Gly	Ala	Leu	His	Val	Leu	Leu	Pro	Ala
			20					25					30		
Arg	Ala	Pro	Gly	Pro	Pro	Gln	Arg	Leu	Ser	Phe	Ser	Phe	Gly	Asp	His
			35				40					45			
Leu	Ala	Glu	Asp	Leu	Cys	Val	Gln	Ala	Ala	Lys	Ala	Ser	Gly	Ile	Leu
			50			55					60				
Pro	Val	Tyr	His	Ser	Leu	Phe	Ala	Leu	Ala	Thr	Glu	Asp	Leu	Ser	Cys
65					70					75					80

Trp	Phe	Pro	Pro	Ser	His	Ile	Phe	Ser	Val	Glu	Asp	Ala	Ser	Thr	Gln	
				85					90					95		
Val	Leu	Leu	Tyr	Arg	Ile	Arg	Phe	Tyr	Phe	Pro	Asn	Trp	Phe	Gly	Leu	
			100					105					110			
Glu	Lys	Cys	His	Arg	Phe	Gly	Leu	Arg	Lys	Asp	Leu	Ala	Ser	Ala	Ile	
		115					120					125				
Leu	Asp	Leu	Pro	Val	Leu	Glu	His	Leu	Phe	Ala	Gln	His	Arg	Ser	Asp	
	130					135					140					
Leu	Val	Ser	Gly	Arg	Leu	Pro	Val	Gly	Leu	Ser	Leu	Lys	Glu	Gln	Gly	
145					150					155					160	
Glu	Cys	Leu	Ser	Leu	Ala	Val	Leu	Asp	Leu	Ala	Arg	Met	Ala	Arg	Glu	
				165					170						175	
Gln	Ala	Gln	Arg	Pro	Gly	Glu	Leu	Leu	Lys	Thr	Val	Ser	Tyr	Lys	Ala	
			180					185						190		
Cys	Leu	Pro	Pro	Ser	Leu	Arg	Asp	Leu	Ile	Gln	Gly	Leu	Ser	Phe	Val	
		195					200					205				
Thr	Arg	Arg	Ala	Ile	Arg	Arg	Thr	Val	Arg	Arg	Ala	Leu	Pro	Arg	Val	
	210					215					220					
Ala	Ala	Cys	Gln	Ala	Asp	Arg	His	Ser	Leu	Met	Ala	Lys	Tyr	Ile	Met	
225					230					235					240	
Asp	Leu	Glu	Arg	Leu	Asp	Pro	Ala	Gly	Ala	Ala	Glu	Thr	Phe	His	Val	
				245					250					255		
Gly	Leu	Pro	Gly	Ala	Leu	Gly	Gly	His	Asp	Gly	Leu	Gly	Leu	Leu	Arg	
			260					265						270		
Val	Ala	Gly	Asp	Gly	Gly	Ile	Ala	Trp	Thr	Gln	Gly	Glu	Gln	Glu	Val	
		275					280					285				
Leu	Gln	Pro	Phe	Cys	Asp	Phe	Pro	Glu	Ile	Val	Asp	Ile	Ser	Ile	Lys	
	290					295					300					
Gln	Ala	Pro	Arg	Val	Gly	Pro	Ala	Gly	Glu	His	Arg	Leu	Val	Thr	Val	
305					310					315					320	
Thr	Arg	Thr	Asp	Asn	Gln	Ile	Leu	Glu	Ala	Glu	Phe	Pro	Gly	Leu	Pro	
				325					330					335		
Glu	Ala	Leu	Ser	Phe	Val	Ala	Leu	Val	Asp	Gly	Tyr	Phe	Arg	Leu	Thr	
			340					345					350			
Thr	Asp	Ser	Gln	His	Phe	Phe	Cys	Lys	Glu	Val	Ala	Pro	Pro	Arg	Leu	
		355					360					365				
Leu	Glu	Glu	Val	Ala	Glu	Gln	Cys	His	Gly	Pro	Ile	Thr	Leu	Asp	Phe	
	370					375					380					

Ala	Ile	Asn	Lys	Leu	Lys	Thr	Gly	Gly	Ser	Arg	Pro	Gly	Ser	Tyr	Val	385	390	395	400
Leu	Arg	Arg	Ser	Pro	Gln	Asp	Phe	Asp	Ser	Phe	Leu	Leu	Thr	Val	Cys	405	410		415
Val	Gln	Asn	Pro	Leu	Gly	Pro	Asp	Tyr	Lys	Gly	Cys	Leu	Ile	Arg	Arg	420	425		430
Ser	Pro	Thr	Gly	Thr	Phe	Leu	Leu	Val	Gly	Leu	Ser	Arg	Pro	His	Ser	435	440		445
Ser	Leu	Arg	Glu	Leu	Leu	Ala	Thr	Cys	Trp	Asp	Gly	Gly	Leu	His	Val	450	455		460
Asp	Gly	Val	Ala	Val	Thr	Leu	Thr	Ser	Cys	Cys	Ile	Pro	Arg	Pro	Lys	465	470		475
Glu	Lys	Ser	Asn	Leu	Ile	Val	Val	Gln	Arg	Gly	His	Ser	Pro	Pro	Thr	485	490		495
Ser	Ser	Leu	Val	Gln	Pro	Gln	Ser	Gln	Tyr	Gln	Leu	Ser	Gln	Met	Thr	500	505		510
Phe	His	Lys	Ile	Pro	Ala	Asp	Ser	Leu	Glu	Trp	His	Glu	Asn	Leu	Gly	515	520		525
His	Gly	Ser	Phe	Thr	Lys	Ile	Tyr	Arg	Gly	Cys	Arg	His	Glu	Val	Val	530	535		540
Asp	Gly	Glu	Ala	Arg	Lys	Thr	Glu	Val	Leu	Leu	Lys	Val	Met	Asp	Ala	545	550		555
Lys	His	Lys	Asn	Cys	Met	Glu	Ser	Phe	Leu	Glu	Ala	Ala	Ser	Leu	Met	565	570		575
Ser	Gln	Val	Ser	Tyr	Arg	His	Leu	Val	Leu	Leu	His	Gly	Val	Cys	Met	580	585		590
Ala	Gly	Asp	Ser	Thr	Met	Val	Gln	Glu	Phe	Val	His	Leu	Gly	Ala	Ile	595	600		605
Asp	Met	Tyr	Leu	Arg	Lys	Arg	Gly	His	Leu	Val	Pro	Ala	Ser	Trp	Lys	610	615		620
Leu	Gln	Val	Val	Lys	Gln	Leu	Ala	Tyr	Ala	Leu	Asn	Tyr	Leu	Glu	Asp	625	630		635
Lys	Gly	Leu	Pro	His	Gly	Asn	Val	Ser	Ala	Arg	Lys	Val	Leu	Leu	Ala	645	650		655
Arg	Glu	Gly	Ala	Asp	Gly	Ser	Pro	Pro	Phe	Ile	Lys	Leu	Ser	Asp	Pro	660	665		670
Gly	Val	Ser	Pro	Ala	Val	Leu	Ser	Leu	Glu	Met	Leu	Thr	Asp	Arg	Ile	675	680		685

Pro	Trp	Val	Ala	Pro	Glu	Cys	Leu	Arg	Glu	Ala	Gln	Thr	Leu	Ser	Leu	690	695	700
Glu	Ala	Asp	Lys	Trp	Gly	Phe	Gly	Ala	Thr	Val	Trp	Glu	Val	Phe	Ser	705	710	715
Gly	Val	Thr	Met	Pro	Ile	Ser	Ala	Leu	Asp	Pro	Ala	Lys	Lys	Leu	Gln	725	730	735
Phe	Tyr	Glu	Asp	Arg	Gln	Gln	Leu	Pro	Ala	Pro	Lys	Trp	Thr	Glu	Leu	740	745	750
Ala	Leu	Leu	Ile	Gln	Gln	Cys	Met	Ala	Tyr	Glu	Pro	Val	Gln	Arg	Pro	755	760	765
Ser	Phe	Arg	Ala	Val	Ile	Arg	Asp	Leu	Asn	Ser	Leu	Ile	Ser	Ser	Asp	770	775	780
Tyr	Glu	Leu	Leu	Ser	Asp	Pro	Thr	Pro	Gly	Ala	Leu	Ala	Pro	Arg	Asp	785	790	795
Gly	Leu	Trp	Asn	Gly	Ala	Gln	Leu	Tyr	Ala	Cys	Gln	Asp	Pro	Thr	Ile	805	810	815
Phe	Glu	Glu	Arg	His	Leu	Lys	Tyr	Ile	Ser	Gln	Leu	Gly	Lys	Gly	Asn	820	825	830
Phe	Gly	Ser	Val	Glu	Leu	Cys	Arg	Tyr	Asp	Pro	Leu	Ala	His	Asn	Thr	835	840	845
Gly	Ala	Leu	Val	Ala	Val	Lys	Gln	Leu	Gln	His	Ser	Gly	Pro	Asp	Gln	850	855	860
Gln	Arg	Asp	Phe	Gln	Arg	Glu	Ile	Gln	Ile	Leu	Lys	Ala	Leu	His	Ser	865	870	875
Asp	Phe	Ile	Val	Lys	Tyr	Arg	Gly	Val	Ser	Tyr	Gly	Pro	Gly	Arg	Pro	885	890	895
Glu	Leu	Arg	Leu	Val	Met	Glu	Tyr	Leu	Pro	Ser	Gly	Cys	Leu	Arg	Asp	900	905	910
Phe	Leu	Gln	Arg	His	Arg	Ala	Arg	Leu	Asp	Ala	Ser	Arg	Leu	Leu	Leu	915	920	925
Tyr	Ser	Ser	Gln	Ile	Cys	Lys	Gly	Met	Glu	Tyr	Leu	Gly	Ser	Arg	Arg	930	935	940
Cys	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Ile	Leu	Val	Glu	Ser	Glu	945	950	955
Ala	His	Val	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ala	Lys	Leu	Leu	Pro	Leu	965	970	975
Asp	Lys	Asp	Tyr	Tyr	Val	Val	Arg	Glu	Pro	Gly	Gln	Ser	Pro	Ile	Phe	980	985	990

Trp Tyr Ala Pro Glu Ser Leu Ser Asp Asn Ile Phe Ser Arg Gln Ser
 995 1000 1005

Asp Val Trp Ser Phe Gly Val Val Leu Tyr Glu Leu Phe Thr Tyr
 1010 1015 1020

Cys Asp Lys Ser Cys Ser Pro Ser Ala Glu Phe Leu Arg Met Met
 1025 1030 1035

Gly Cys Glu Arg Asp Val Pro Ala Leu Cys Arg Leu Leu Glu Leu
 1040 1045 1050

Leu Glu Glu Gly Gln Arg Leu Pro Ala Pro Pro Ala Cys Pro Ala
 1055 1060 1065

Glu Val His Glu Leu Met Lys Leu Cys Trp Ala Pro Ser Pro Gln
 1070 1075 1080

Asp Arg Pro Ser Phe Ser Ala Leu Gly Pro Gln Leu Asp Met Leu
 1085 1090 1095

Trp Ser Gly Ser Arg Gly Cys Glu Thr His Ala Phe Thr Ala His
 1100 1105 1110

Pro Glu Gly Lys His His Ser Leu Ser Phe Ser
 1115 1120

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 <212> PRT
 <213> Homo sapiens

<400> 200

Met Ala Glu Ser Ala Gly Ala Ser Ser Phe Phe Pro Leu Val Val Leu
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Leu Leu Ala Gly Ser Gly Gly Ser Gly Pro Arg Gly Val Gln Ala Leu
 20 25 30

Leu Cys Ala Cys Thr Ser Cys Leu Gln Ala Asn Tyr Thr Cys Glu Thr
 35 40 45

Asp Gly Ala Cys Met Val Ser Ile Phe Asn Leu Asp Gly Met Glu His
 50 55 60

His Val Arg Thr Cys Ile Pro Lys Val Glu Leu Val Pro Ala Gly Lys
 65 70 75 80

Pro Phe Tyr Cys Leu Ser Ser Glu Asp Leu Arg Asn Thr His Cys Cys
 85 90 95

Tyr Thr Asp Tyr Cys Asn Arg Ile Asp Leu Arg Val Pro Ser Gly His
 100 105 110

Leu Lys Glu Pro Glu His Pro Ser Met Trp Gly Pro Val Glu Leu Val
 115 120 125

Gly	Ile	Ile	Ala	Gly	Pro	Val	Phe	Leu	Leu	Phe	Leu	Ile	Ile	Ile	Ile	130	135	140	
Val	Phe	Leu	Val	Ile	Asn	Tyr	His	Gln	Arg	Val	Tyr	His	Asn	Arg	Gln	145	150	155	160
Arg	Leu	Asp	Met	Glu	Asp	Pro	Ser	Cys	Glu	Met	Cys	Leu	Ser	Lys	Asp	165	170	175	
Lys	Thr	Leu	Gln	Asp	Leu	Val	Tyr	Asp	Leu	Ser	Thr	Ser	Gly	Ser	Gly	180	185	190	
Ser	Gly	Leu	Pro	Leu	Phe	Val	Gln	Arg	Thr	Val	Ala	Arg	Thr	Ile	Val	195	200	205	
Leu	Gln	Glu	Ile	Ile	Gly	Lys	Gly	Arg	Phe	Gly	Glu	Val	Trp	Arg	Gly	210	215	220	
Arg	Trp	Arg	Gly	Gly	Asp	Val	Ala	Val	Lys	Ile	Phe	Ser	Ser	Arg	Glu	225	230	235	240
Glu	Arg	Ser	Trp	Phe	Arg	Glu	Ala	Glu	Ile	Tyr	Gln	Thr	Val	Met	Leu	245	250	255	
Arg	His	Glu	Asn	Ile	Leu	Gly	Phe	Ile	Ala	Ala	Asp	Asn	Lys	Asp	Asn	260	265	270	
Gly	Thr	Trp	Thr	Gln	Leu	Trp	Leu	Val	Ser	Asp	Tyr	His	Glu	His	Gly	275	280	285	
Ser	Leu	Phe	Asp	Tyr	Leu	Asn	Arg	Tyr	Thr	Val	Thr	Ile	Glu	Gly	Met	290	295	300	
Ile	Lys	Leu	Ala	Leu	Ser	Ala	Ala	Ser	Gly	Leu	Ala	His	Leu	His	Met	305	310	315	320
Glu	Ile	Val	Gly	Thr	Gln	Gly	Lys	Pro	Gly	Ile	Ala	His	Arg	Asp	Leu	325	330	335	
Lys	Ser	Lys	Asn	Ile	Leu	Val	Lys	Lys	Asn	Gly	Met	Cys	Ala	Ile	Ala	340	345	350	
Asp	Leu	Gly	Leu	Ala	Val	Arg	His	Asp	Ala	Val	Thr	Asp	Thr	Ile	Asp	355	360	365	
Ile	Ala	Pro	Asn	Gln	Arg	Val	Gly	Thr	Lys	Arg	Tyr	Met	Ala	Pro	Glu	370	375	380	
Val	Leu	Asp	Glu	Thr	Ile	Asn	Met	Lys	His	Phe	Asp	Ser	Phe	Lys	Cys	385	390	395	400
Ala	Asp	Ile	Tyr	Ala	Leu	Gly	Leu	Val	Tyr	Trp	Glu	Ile	Ala	Arg	Arg	405	410	415	
Cys	Asn	Ser	Gly	Gly	Val	His	Glu	Glu	Tyr	Gln	Leu	Pro	Tyr	Tyr	Asp	420	425	430	

Leu Val Pro Ser Asp Pro Ser Ile Glu Glu Met Arg Lys Val Val Cys
435 440 445

Asp Gln Lys Leu Arg Pro Asn Ile Pro Asn Trp Trp Gln Ser Tyr Glu
450 455 460

Ala Leu Arg Val Met Gly Lys Met Met Arg Glu Cys Trp Tyr Ala Asn
465 470 475 480

Gly Ala Ala Arg Leu Thr Ala Leu Arg Ile Lys Lys Thr Leu Ser Gln
485 490 495

Leu Ser Val Gln Glu Asp Val Lys Ile
500 505

<210> 201

<211> 626

<212> PRT

<213> Homo sapiens

<400> 201

Met Asp Glu Gln Glu Ala Leu Asn Ser Ile Met Asn Asp Leu Val Ala
1 5 10 15

Leu Gln Met Asn Arg Arg His Arg Met Pro Gly Tyr Glu Thr Met Lys
20 25 30

Asn Lys Asp Thr Gly His Ser Asn Arg Gln Ser Asp Val Arg Ile Lys
35 40 45

Phe Glu His Asn Gly Glu Arg Arg Ile Ile Ala Phe Ser Arg Pro Val
50 55 60

Lys Tyr Glu Asp Val Glu His Lys Val Thr Thr Val Phe Gly Gln Pro
65 70 75 80

Leu Asp Leu His Tyr Met Asn Asn Glu Leu Ser Ile Leu Leu Lys Asn
85 90 95

Gln Asp Asp Leu Asp Lys Ala Ile Asp Ile Leu Asp Arg Ser Ser Ser
100 105 110

Met Lys Ser Leu Arg Ile Leu Leu Leu Ser Gln Asp Arg Asn His Asn
115 120 125

Ser Ser Ser Pro His Ser Glu Val Ser Arg Gln Val Arg Ile Lys Ala
130 135 140

Ser Gln Ser Ala Gly Asp Ile Asn Thr Ile Tyr Gln Pro Pro Glu Pro
145 150 155 160

Arg Ser Arg His Leu Ser Val Ser Ser Gln Asn Pro Gly Arg Ser Ser
165 170 175

Pro Pro Pro Gly Tyr Val Pro Glu Arg Gln Gln His Ile Ala Arg Gln

180					185					190					
Gly	Ser	Tyr	Thr	Ser	Ile	Asn	Ser	Glu	Gly	Glu	Phe	Ile	Pro	Glu	Thr
		195					200					205			
Ser	Glu	Gln	Cys	Met	Leu	Asp	Pro	Leu	Ser	Ser	Ala	Glu	Asn	Ser	Leu
	210					215					220				
Ser	Gly	Ser	Cys	Gln	Ser	Leu	Asp	Arg	Ser	Ala	Asp	Ser	Pro	Ser	Phe
225					230					235					240
Arg	Lys	Ser	Arg	Met	Ser	Arg	Ala	Gln	Ser	Phe	Pro	Asp	Asn	Arg	Gln
				245					250					255	
Glu	Tyr	Ser	Asp	Arg	Glu	Thr	Gln	Leu	Tyr	Asp	Lys	Gly	Val	Lys	Gly
			260					265					270		
Gly	Thr	Tyr	Pro	Arg	Arg	Tyr	His	Val	Ser	Val	His	His	Lys	Asp	Tyr
		275					280					285			
Ser	Asp	Gly	Arg	Arg	Thr	Phe	Pro	Arg	Ile	Arg	Arg	His	Gln	Gly	Asn
	290					295					300				
Leu	Phe	Thr	Leu	Val	Pro	Ser	Ser	Arg	Ser	Leu	Ser	Thr	Asn	Gly	Glu
305					310					315					320
Asn	Met	Gly	Leu	Ala	Val	Gln	Tyr	Leu	Asp	Pro	Arg	Gly	Arg	Leu	Arg
				325					330					335	
Ser	Ala	Asp	Ser	Glu	Asn	Ala	Leu	Ser	Val	Gln	Glu	Arg	Asn	Val	Pro
			340					345					350		
Thr	Lys	Ser	Pro	Ser	Ala	Pro	Ile	Asn	Trp	Arg	Arg	Gly	Lys	Leu	Leu
		355					360						365		
Gly	Gln	Gly	Ala	Phe	Gly	Arg	Val	Tyr	Leu	Cys	Tyr	Asp	Val	Asp	Thr
	370					375						380			
Gly	Arg	Glu	Leu	Ala	Ser	Lys	Gln	Val	Gln	Phe	Asp	Pro	Asp	Ser	Pro
385					390					395					400
Glu	Thr	Ser	Lys	Glu	Val	Ser	Ala	Leu	Glu	Cys	Glu	Ile	Gln	Leu	Leu
				405					410					415	
Lys	Asn	Leu	Gln	His	Glu	Arg	Ile	Val	Gln	Tyr	Tyr	Gly	Cys	Leu	Arg
			420					425					430		
Asp	Arg	Ala	Glu	Lys	Thr	Leu	Thr	Ile	Phe	Met	Glu	Tyr	Met	Pro	Gly
		435					440					445			
Gly	Ser	Val	Lys	Asp	Gln	Leu	Lys	Ala	Tyr	Gly	Ala	Leu	Thr	Glu	Ser
	450					455					460				
Val	Thr	Arg	Lys	Tyr	Thr	Arg	Gln	Ile	Leu	Glu	Gly	Met	Ser	Tyr	Leu
465					470					475					480
His	Ser	Asn	Met	Ile	Val	His	Arg	Asp	Ile	Lys	Gly	Ala	Asn	Ile	Leu

485					490					495					
Arg	Asp	Ser	Ala	Gly	Asn	Val	Lys	Leu	Gly	Asp	Phe	Gly	Ala	Ser	Lys
			500					505					510		
Arg	Leu	Gln	Thr	Ile	Cys	Met	Ser	Gly	Thr	Gly	Met	Arg	Ser	Val	Thr
		515					520					525			
Gly	Thr	Pro	Tyr	Trp	Met	Ser	Pro	Glu	Val	Ile	Ser	Gly	Glu	Gly	Tyr
		530				535					540				
Gly	Arg	Lys	Ala	Asp	Val	Trp	Ser	Leu	Gly	Cys	Thr	Val	Val	Glu	Met
545					550					555					560
Leu	Thr	Glu	Lys	Pro	Pro	Trp	Ala	Glu	Tyr	Glu	Ala	Met	Ala	Ala	Ile
			565						570						575
Phe	Lys	Ile	Ala	Thr	Gln	Pro	Thr	Asn	Pro	Gln	Leu	Pro	Ser	His	Ile
			580					585					590		
Ser	Glu	His	Gly	Arg	Asp	Phe	Leu	Arg	Arg	Ile	Phe	Val	Glu	Ala	Arg
		595					600					605			
Gln	Arg	Pro	Ser	Ala	Glu	Glu	Leu	Leu	Thr	His	His	Phe	Ala	Gln	Leu
	610					615					620				
Met	Tyr														
625															
<210>	202														
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<212>	PRT														
<213>	Homo sapiens														
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Met	Asp	Glu	Gln	Glu	Ala	Leu	Asn	Ser	Ile	Met	Asn	Asp	Leu	Val	Ala
1				5					10					15	
Leu	Gln	Met	Asn	Arg	Arg	His	Arg	Met	Pro	Gly	Tyr	Glu	Thr	Met	Lys
		20						25					30		
Asn	Lys	Asp	Thr	Gly	His	Ser	Asn	Arg	Gln	Ser	Asp	Val	Arg	Ile	Lys
	35						40					45			
Phe	Glu	His	Asn	Gly	Glu	Arg	Arg	Ile	Ile	Ala	Phe	Ser	Arg	Pro	Val
	50					55					60				
Lys	Tyr	Glu	Asp	Val	Glu	His	Lys	Val	Thr	Thr	Val	Phe	Gly	Gln	Pro
65						70					75				80
Leu	Asp	Leu	His	Tyr	Met	Asn	Asn	Glu	Leu	Ser	Ile	Leu	Leu	Lys	Asn
			85						90					95	
Gln	Asp	Asp	Leu	Asp	Lys	Ala	Ile	Asp	Ile	Leu	Asp	Arg	Ser	Ser	Ser
			100					105						110	

Met Lys Ser Leu Arg Ile Leu Leu Leu Ser Gln Asp Arg Asn His Asn
115 120 125
Ser Ser Ser Pro His Ser Glu Val Ser Arg Gln Val Arg Ile Lys Ala
130 135 140
Ser Gln Ser Ala Gly Asp Ile Asn Thr Ile Tyr Gln Pro Pro Glu Pro
145 150 155 160
Arg Ser Arg His Leu Ser Val Ser Ser Gln Asn Pro Gly Arg Ser Ser
165 170 175
Pro Pro Pro Gly Tyr Val Pro Glu Arg Gln Gln His Ile Ala Arg Gln
180 185 190
Gly Ser Tyr Thr Ser Ile Asn Ser Glu Gly Glu Phe Ile Pro Glu Thr
195 200 205
Ser Glu Gln Cys Met Leu Asp Pro Leu Ser Ser Ala Glu Asn Ser Leu
210 215 220
Ser Gly Ser Cys Gln Ser Leu Asp Arg Ser Ala Asp Ser Pro Ser Phe
225 230 235 240
Arg Lys Ser Arg Met Ser Arg Ala Gln Ser Phe Pro Asp Asn Arg Gln
245 250 255
Glu Tyr Ser Asp Arg Glu Thr Gln Leu Tyr Asp Lys Gly Val Lys Gly
260 265 270
Gly Thr Tyr Pro Arg Arg Tyr His Val Ser Val His His Lys Asp Tyr
275 280 285
Ser Asp Gly Arg Arg Thr Phe Pro Arg Ile Arg Arg His Gln Gly Asn
290 295 300
Leu Phe Thr Leu Val Pro Ser Ser Arg Ser Leu Ser Thr Asn Gly Glu
305 310 315 320
Asn Met Gly Leu Ala Val Gln Tyr Leu Asp Pro Arg Gly Arg Leu Arg
325 330 335
Ser Ala Asp Ser Glu Asn Ala Leu Ser Val Gln Glu Arg Asn Val Pro
340 345 350
Thr Lys Ser Pro Ser Ala Pro Ile Asn Trp Arg Arg Gly Lys Leu Leu
355 360 365
Gly Gln Gly Ala Phe Gly Arg Val Tyr Leu Cys Tyr Asp Val Asp Thr
370 375 380
Gly Arg Glu Leu Ala Ser Lys Gln Val Gln Phe Asp Pro Asp Ser Pro
385 390 395 400
Glu Thr Ser Lys Glu Val Ser Ala Leu Glu Cys Glu Ile Gln Leu Leu
405 410 415

Lys Asn Leu Gln His Glu Arg Ile Val Gln Tyr Tyr Gly Cys Leu Arg
420 425 430

Asp Arg Ala Glu Lys Thr Leu Thr Ile Phe Met Glu Tyr Met Pro Gly
435 440 445

Gly Ser Val Lys Asp Gln Leu Lys Ala Tyr Gly Ala Leu Thr Glu Ser
450 455 460

Val Thr Arg Lys Tyr Thr Arg Gln Ile Leu Glu Gly Met Ser Tyr Leu
465 470 475 480

His Ser Asn Met Ile Val His Arg Asp Ile Lys Gly Ala Asn Ile Leu
485 490 495

Arg Asp Ser Ala Gly Asn Val Lys Leu Gly Asp Phe Gly Ala Ser Lys
500 505 510

Arg Leu Gln Thr Ile Cys Met Ser Gly Thr Gly Met Arg Ser Val Thr
515 520 525

Gly Thr Pro Tyr Trp Met Ser Pro Glu Val Ile Ser Gly Glu Gly Tyr
530 535 540

Gly Arg Lys Ala Asp Val Trp Ser Leu Gly Cys Thr Val Val Glu Met
545 550 555 560

Leu Thr Glu Lys Pro Pro Trp Ala Glu Tyr Glu Ala Met Ala Ala Ile
565 570 575

Phe Lys Ile Ala Thr Gln Pro Thr Asn Pro Gln Leu Pro Ser His Ile
580 585 590

Ser Glu His Gly Arg Asp Phe Leu Arg Arg Ile Phe Val Glu Ala Arg
595 600 605

Gln Arg Pro Ser Ala Glu Glu Leu Leu Thr His His Phe Ala Gln Leu
610 615 620

Met Tyr
625

<210> 203
<211> 372
<212> PRT
<213> Homo sapiens

<400> 203

Met Ala Lys Gln Tyr Asp Ser Val Glu Cys Pro Phe Cys Asp Glu Val
1 5 10 15

Ser Lys Tyr Glu Lys Leu Ala Lys Ile Gly Gln Gly Thr Phe Gly Glu
20 25 30

Val Phe Lys Ala Arg His Arg Lys Thr Gly Gln Lys Val Ala Leu Lys
35 40 45

Lys Val Leu Met Glu Asn Glu Lys Glu Gly Phe Pro Ile Thr Ala Leu
 50 55 60

Arg Glu Ile Lys Ile Leu Gln Leu Leu Lys His Glu Asn Val Val Asn
 65 70 75 80

Leu Ile Glu Ile Cys Arg Thr Lys Ala Ser Pro Tyr Asn Arg Cys Lys
 85 90 95

Gly Ser Ile Tyr Leu Val Phe Asp Phe Cys Glu His Asp Leu Ala Gly
 100 105 110

Leu Leu Ser Asn Val Leu Val Lys Phe Thr Leu Ser Glu Ile Lys Arg
 115 120 125

Val Met Gln Met Leu Leu Asn Gly Leu Tyr Tyr Ile His Arg Asn Lys
 130 135 140

Ile Leu His Arg Asp Met Lys Ala Ala Asn Val Leu Ile Thr Arg Asp
 145 150 155 160

Gly Val Leu Lys Leu Ala Asp Phe Gly Leu Ala Arg Ala Phe Ser Leu
 165 170 175

Ala Lys Asn Ser Gln Pro Asn Arg Tyr Thr Asn Arg Val Val Thr Leu
 180 185 190

Trp Tyr Arg Pro Pro Glu Leu Leu Leu Gly Glu Arg Asp Tyr Gly Pro
 195 200 205

Pro Ile Asp Leu Trp Gly Ala Gly Cys Ile Met Ala Glu Met Trp Thr
 210 215 220

Arg Ser Pro Ile Met Gln Gly Asn Thr Glu Gln His Gln Leu Ala Leu
 225 230 235 240

Ile Ser Gln Leu Cys Gly Ser Ile Thr Pro Glu Val Trp Pro Asn Val
 245 250 255

Asp Asn Tyr Glu Leu Tyr Glu Lys Leu Glu Leu Val Lys Gly Gln Lys
 260 265 270

Arg Lys Val Lys Asp Arg Leu Lys Ala Tyr Val Arg Asp Pro Tyr Ala
 275 280 285

Leu Asp Leu Ile Asp Lys Leu Leu Val Leu Asp Pro Ala Gln Arg Ile
 290 295 300

Asp Ser Asp Asp Ala Leu Asn His Asp Phe Phe Trp Ser Asp Pro Met
 305 310 315 320

Pro Ser Asp Leu Lys Gly Met Leu Ser Thr His Leu Thr Ser Met Phe
 325 330 335

Glu Tyr Leu Ala Pro Pro Arg Arg Lys Gly Ser Gln Ile Thr Gln Gln
 340 345 350

Ser Thr Asn Gln Ser Arg Asn Pro Ala Thr Thr Asn Gln Thr Glu Phe
355 360 365

Glu Arg Val Phe
370

<210> 204
<211> 303
<212> PRT
<213> Homo sapiens

<400> 204

Met Ala Thr Ser Arg Tyr Glu Pro Val Ala Glu Ile Gly Val Gly Ala
1 5 10 15

Tyr Gly Thr Val Tyr Lys Ala Arg Asp Pro His Ser Gly His Phe Val
20 25 30

Ala Leu Lys Ser Val Arg Val Pro Asn Gly Gly Gly Gly Gly Gly Gly
35 40 45

Leu Pro Ile Ser Thr Val Arg Glu Val Ala Leu Leu Arg Arg Leu Glu
50 55 60

Ala Phe Glu His Pro Asn Val Val Arg Leu Met Asp Val Cys Ala Thr
65 70 75 80

Ser Arg Thr Asp Arg Glu Ile Lys Val Thr Leu Val Phe Glu His Val
85 90 95

Asp Gln Asp Leu Arg Thr Tyr Leu Asp Lys Ala Pro Pro Pro Gly Leu
100 105 110

Pro Ala Glu Thr Ile Lys Asp Leu Met Arg Gln Phe Leu Arg Gly Leu
115 120 125

Asp Phe Leu His Ala Asn Cys Ile Val His Arg Asp Leu Lys Pro Glu
130 135 140

Asn Ile Leu Val Thr Ser Gly Gly Thr Val Lys Leu Ala Asp Phe Gly
145 150 155 160

Leu Ala Arg Ile Tyr Ser Tyr Gln Met Ala Leu Thr Pro Val Val Val
165 170 175

Thr Leu Trp Tyr Arg Ala Pro Glu Val Leu Leu Gln Ser Thr Tyr Ala
180 185 190

Thr Pro Val Asp Met Trp Ser Val Gly Cys Ile Phe Ala Glu Met Phe
195 200 205

Arg Arg Lys Pro Leu Phe Cys Gly Asn Ser Glu Ala Asp Gln Leu Gly
210 215 220

Lys Ile Phe Asp Leu Ile Gly Leu Pro Pro Glu Asp Asp Trp Pro Arg

225		230		235		240									
Asp	Val	Ser	Leu	Pro	Arg	Gly	Ala	Phe	Pro	Pro	Arg	Gly	Pro	Arg	Pro
				245					250					255	
Val	Gln	Ser	Val	Val	Pro	Glu	Met	Glu	Glu	Ser	Gly	Ala	Gln	Leu	Leu
			260					265					270		
Leu	Glu	Met	Leu	Thr	Phe	Asn	Pro	His	Lys	Arg	Ile	Ser	Ala	Phe	Arg
		275					280					285			
Ala	Leu	Gln	His	Ser	Tyr	Leu	His	Lys	Asp	Glu	Gly	Asn	Pro	Glu	
	290					295					300				

<210> 205
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 <212> PRT
 <213> Homo sapiens

<400> 205

Met	Ala	Thr	Ser	Arg	Tyr	Glu	Pro	Val	Ala	Glu	Ile	Gly	Val	Gly	Ala
1			5					10					15		
Tyr	Gly	Thr	Val	Tyr	Lys	Ala	Arg	Asp	Pro	His	Ser	Gly	His	Phe	Val
		20					25					30			
Ala	Leu	Lys	Ser	Val	Arg	Val	Pro	Asn	Gly	Gly	Gly	Gly	Gly	Gly	Gly
	35					40					45				
Leu	Pro	Ile	Ser	Thr	Val	Arg	Glu	Val	Ala	Leu	Leu	Arg	Arg	Leu	Glu
	50				55					60					
Ala	Phe	Glu	His	Pro	Asn	Val	Val	Arg	Leu	Met	Asp	Val	Cys	Ala	Thr
65				70					75					80	
Ser	Arg	Thr	Asp	Arg	Glu	Ile	Lys	Val	Thr	Leu	Val	Phe	Glu	His	Val
			85					90					95		
Asp	Gln	Asp	Leu	Arg	Thr	Tyr	Leu	Asp	Lys	Ala	Pro	Pro	Pro	Gly	Leu
		100						105					110		
Pro	Ala	Glu	Thr	Ile	Lys	Asp	Leu	Met	Arg	Gln	Phe	Leu	Arg	Gly	Leu
		115					120					125			
Asp	Phe	Leu	His	Ala	Asn	Cys	Ile	Val	His	Arg	Asp	Leu	Lys	Pro	Glu
	130					135				140					
Asn	Ile	Leu	Val	Thr	Ser	Gly	Gly	Thr	Val	Lys	Leu	Ala	Asp	Phe	Gly
145				150					155					160	
Leu	Ala	Arg	Ile	Tyr	Ser	Tyr	Gln	Met	Ala	Leu	Thr	Pro	Val	Val	Val
			165					170					175		
Thr	Leu	Trp	Tyr	Arg	Ala	Pro	Glu	Val	Leu	Leu	Gln	Ser	Thr	Tyr	Ala
			180				185						190		

Thr Pro Val Asp Met Trp Ser Val Gly Cys Ile Phe Ala Glu Met Phe
195 200 205

Arg Arg Lys Pro Leu Phe Cys Gly Asn Ser Glu Ala Asp Gln Leu Gly
210 215 220

Lys Ile Phe Asp Leu Ile Gly Leu Pro Pro Glu Asp Asp Trp Pro Arg
225 230 235 240

Asp Val Ser Leu Pro Arg Gly Ala Phe Pro Pro Arg Gly Pro Arg Pro
245 250 255

Val Gln Ser Val Val Pro Glu Met Glu Glu Ser Gly Ala Gln Leu Leu
260 265 270

Leu Glu Met Leu Thr Phe Asn Pro His Lys Arg Ile Ser Ala Phe Arg
275 280 285

Ala Leu Gln His Ser Tyr Leu His Lys Asp Glu Gly Asn Pro Glu
290 295 300

<210> 206
<211> 590
<212> PRT
<213> Homo sapiens

<400> 206

Met Glu Leu Glu Asn Ile Val Ala Asn Thr Val Leu Leu Lys Ala Arg
1 5 10 15

Glu Gly Gly Gly Gly Lys Arg Lys Gly Lys Ser Lys Lys Trp Lys Glu
20 25 30

Ile Leu Lys Phe Pro His Ile Ser Gln Cys Glu Asp Leu Arg Arg Thr
35 40 45

Ile Asp Arg Asp Tyr Cys Ser Leu Cys Asp Lys Gln Pro Ile Gly Arg
50 55 60

Leu Leu Phe Arg Gln Phe Cys Glu Thr Arg Pro Gly Leu Glu Cys Tyr
65 70 75 80

Ile Gln Phe Leu Asp Ser Val Ala Glu Tyr Glu Val Thr Pro Asp Glu
85 90 95

Lys Leu Gly Glu Lys Gly Lys Glu Ile Met Thr Lys Tyr Leu Thr Pro
100 105 110

Lys Ser Pro Val Phe Ile Ala Gln Val Gly Gln Asp Leu Val Ser Gln
115 120 125

Thr Glu Glu Lys Leu Leu Gln Lys Pro Cys Lys Glu Leu Phe Ser Ala
130 135 140

Cys Ala Gln Ser Val His Glu Tyr Leu Arg Gly Glu Pro Phe His Glu
145 150 155 160

Tyr	Leu	Asp	Ser	Met	Phe	Phe	Asp	Arg	Phe	Leu	Gln	Trp	Lys	Trp	Leu	165	170	175
Glu	Arg	Gln	Pro	Val	Thr	Lys	Asn	Thr	Phe	Arg	Gln	Tyr	Arg	Val	Leu	180	185	190
Gly	Lys	Gly	Gly	Phe	Gly	Glu	Val	Cys	Ala	Cys	Gln	Val	Arg	Ala	Thr	195	200	205
Gly	Lys	Met	Tyr	Ala	Cys	Lys	Arg	Leu	Glu	Lys	Lys	Arg	Ile	Lys	Lys	210	215	220
Arg	Lys	Gly	Glu	Ser	Met	Ala	Leu	Asn	Glu	Lys	Gln	Ile	Leu	Glu	Lys	225	230	235
Val	Asn	Ser	Gln	Phe	Val	Val	Asn	Leu	Ala	Tyr	Ala	Tyr	Glu	Thr	Lys	245	250	255
Asp	Ala	Leu	Cys	Leu	Val	Leu	Thr	Ile	Met	Asn	Gly	Gly	Asp	Leu	Lys	260	265	270
Phe	His	Ile	Tyr	Asn	Met	Gly	Asn	Pro	Gly	Phe	Glu	Glu	Glu	Arg	Ala	275	280	285
Leu	Phe	Tyr	Ala	Ala	Glu	Ile	Leu	Cys	Gly	Leu	Glu	Asp	Leu	His	Arg	290	295	300
Glu	Asn	Thr	Val	Tyr	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Leu	Asp	305	310	315
Asp	Tyr	Gly	His	Ile	Arg	Ile	Ser	Asp	Leu	Gly	Leu	Ala	Val	Lys	Ile	325	330	335
Pro	Glu	Gly	Asp	Leu	Ile	Arg	Gly	Arg	Val	Gly	Thr	Val	Gly	Tyr	Met	340	345	350
Ala	Pro	Glu	Val	Leu	Asn	Asn	Gln	Arg	Tyr	Gly	Leu	Ser	Pro	Asp	Tyr	355	360	365
Trp	Gly	Leu	Gly	Cys	Leu	Ile	Tyr	Glu	Met	Ile	Glu	Gly	Gln	Ser	Pro	370	375	380
Phe	Arg	Gly	Arg	Lys	Glu	Lys	Val	Lys	Arg	Glu	Glu	Val	Asp	Arg	Arg	385	390	395
Val	Leu	Glu	Thr	Glu	Glu	Val	Tyr	Ser	His	Lys	Phe	Ser	Glu	Glu	Ala	405	410	415
Lys	Ser	Ile	Cys	Lys	Met	Leu	Leu	Thr	Lys	Asp	Ala	Lys	Gln	Arg	Leu	420	425	430
Gly	Cys	Gln	Glu	Glu	Gly	Ala	Ala	Glu	Val	Lys	Arg	His	Pro	Phe	Phe	435	440	445
Arg	Asn	Met	Asn	Phe	Lys	Arg	Leu	Glu	Ala	Gly	Met	Leu	Asp	Pro	Pro	450	455	460

Phe Val Pro Asp Pro Arg Ala Val Tyr Cys Lys Asp Val Leu Asp Ile
465 470 475 480

Glu Gln Phe Ser Thr Val Lys Gly Val Asn Leu Asp His Thr Asp Asp
485 490 495

Asp Phe Tyr Ser Lys Phe Ser Thr Gly Ser Val Ser Ile Pro Trp Gln
500 505 510

Asn Glu Met Ile Glu Thr Glu Cys Phe Lys Glu Leu Asn Val Phe Gly
515 520 525

Pro Asn Gly Thr Leu Pro Pro Asp Leu Asn Arg Asn His Pro Pro Glu
530 535 540

Pro Pro Lys Lys Gly Leu Leu Gln Arg Leu Phe Lys Arg Gln His Gln
545 550 555 560

Asn Asn Ser Lys Ser Ser Pro Ser Ser Lys Thr Ser Phe Asn His His
565 570 575

Ile Asn Ser Asn His Val Ser Ser Asn Ser Thr Gly Ser Ser
580 585 590

<210> 207
<211> 590
<212> PRT
<213> Homo sapiens

<400> 207

Met Glu Leu Glu Asn Ile Val Ala Asn Thr Val Leu Leu Lys Ala Arg
1 5 10 15

Glu Gly Gly Gly Gly Lys Arg Lys Gly Lys Ser Lys Lys Trp Lys Glu
20 25 30

Ile Leu Lys Phe Pro His Ile Ser Gln Cys Glu Asp Leu Arg Arg Thr
35 40 45

Ile Asp Arg Asp Tyr Cys Ser Leu Cys Asp Lys Gln Pro Ile Gly Arg
50 55 60

Leu Leu Phe Arg Gln Phe Cys Glu Thr Arg Pro Gly Leu Glu Cys Tyr
65 70 75 80

Ile Gln Phe Leu Asp Ser Val Ala Glu Tyr Glu Val Thr Pro Asp Glu
85 90 95

Lys Leu Gly Glu Lys Gly Lys Glu Ile Met Thr Lys Tyr Leu Thr Pro
100 105 110

Lys Ser Pro Val Phe Ile Ala Gln Val Gly Gln Asp Leu Val Ser Gln
115 120 125

Thr Glu Glu Lys Leu Leu Gln Lys Pro Cys Lys Glu Leu Phe Ser Ala

130					135					140					
Cys 145	Ala	Gln	Ser	Val	His 150	Glu	Tyr	Leu	Arg	Gly 155	Glu	Pro	Phe	His	Glu 160
Tyr	Leu	Asp	Ser	Met 165	Phe	Phe	Asp	Arg	Phe 170	Leu	Gln	Trp	Lys	Trp 175	Leu
Glu	Arg	Gln	Pro 180	Val	Thr	Lys	Asn	Thr 185	Phe	Arg	Gln	Tyr	Arg 190	Val	Leu
Gly	Lys	Gly 195	Gly	Phe	Gly	Glu	Val 200	Cys	Ala	Cys	Gln	Val 205	Arg	Ala	Thr
Gly	Lys 210	Met	Tyr	Ala	Cys	Lys 215	Arg	Leu	Glu	Lys	Lys 220	Arg	Ile	Lys	Lys
Arg 225	Lys	Gly	Glu	Ser	Met 230	Ala	Leu	Asn	Glu	Lys 235	Gln	Ile	Leu	Glu	Lys 240
Val	Asn	Ser	Gln	Phe 245	Val	Val	Asn	Leu	Ala 250	Tyr	Ala	Tyr	Glu	Thr 255	Lys
Asp	Ala	Leu	Cys 260	Leu	Val	Leu	Thr	Ile 265	Met	Asn	Gly	Gly	Asp 270	Leu	Lys
Phe	His	Ile 275	Tyr	Asn	Met	Gly	Asn 280	Pro	Gly	Phe	Glu	Glu 285	Glu	Arg	Ala
Leu	Phe 290	Tyr	Ala	Ala	Glu	Ile 295	Leu	Cys	Gly	Leu	Glu 300	Asp	Leu	His	Arg
Glu 305	Asn	Thr	Val	Tyr	Arg 310	Asp	Leu	Lys	Pro	Glu 315	Asn	Ile	Leu	Leu	Asp 320
Asp	Tyr	Gly	His	Ile 325	Arg	Ile	Ser	Asp	Leu 330	Gly	Leu	Ala	Val	Lys 335	Ile
Pro	Glu	Gly	Asp 340	Leu	Ile	Arg	Gly	Arg 345	Val	Gly	Thr	Val	Gly 350	Tyr	Met
Ala	Pro	Glu 355	Val	Leu	Asn	Asn	Gln 360	Arg	Tyr	Gly	Leu	Ser 365	Pro	Asp	Tyr
Trp	Gly 370	Leu	Gly	Cys	Leu	Ile 375	Tyr	Glu	Met	Ile	Glu 380	Gly	Gln	Ser	Pro
Phe 385	Arg	Gly	Arg	Lys	Glu 390	Lys	Val	Lys	Arg	Glu 395	Glu	Val	Asp	Arg	Arg 400
Val	Leu	Glu	Thr	Glu 405	Glu	Val	Tyr	Ser	His 410	Lys	Phe	Ser	Glu	Glu 415	Ala
Lys	Ser	Ile	Cys 420	Lys	Met	Leu	Leu	Thr 425	Lys	Asp	Ala	Lys	Gln 430	Arg	Leu
Gly	Cys	Gln	Glu	Glu	Gly	Ala	Ala	Glu	Val	Lys	Arg	His	Pro	Phe	Phe

435 440 445
 Arg Asn Met Asn Phe Lys Arg Leu Glu Ala Gly Met Leu Asp Pro Pro
 450 455 460
 Phe Val Pro Asp Pro Arg Ala Val Tyr Cys Lys Asp Val Leu Asp Ile
 465 470 475 480
 Glu Gln Phe Ser Thr Val Lys Gly Val Asn Leu Asp His Thr Asp Asp
 485 490 495
 Asp Phe Tyr Ser Lys Phe Ser Thr Gly Ser Val Ser Ile Pro Trp Gln
 500 505 510
 Asn Glu Met Ile Glu Thr Glu Cys Phe Lys Glu Leu Asn Val Phe Gly
 515 520 525
 Pro Asn Gly Thr Leu Pro Pro Asp Leu Asn Arg Asn His Pro Pro Glu
 530 535 540
 Pro Pro Lys Lys Gly Leu Leu Gln Arg Leu Phe Lys Arg Gln His Gln
 545 550 555 560
 Asn Asn Ser Lys Ser Ser Pro Ser Ser Lys Thr Ser Phe Asn His His
 565 570 575
 Ile Asn Ser Asn His Val Ser Ser Asn Ser Thr Gly Ser Ser
 580 585 590

 <210> 208
 <211> 590
 <212> PRT
 <213> Homo sapiens

 <400> 208

 Met Glu Leu Glu Asn Ile Val Ala Asn Thr Val Leu Leu Lys Ala Arg
 1 5 10 15
 Glu Gly Gly Gly Gly Lys Arg Lys Gly Lys Ser Lys Lys Trp Lys Glu
 20 25 30
 Ile Leu Lys Phe Pro His Ile Ser Gln Cys Glu Asp Leu Arg Arg Thr
 35 40 45
 Ile Asp Arg Asp Tyr Cys Ser Leu Cys Asp Lys Gln Pro Ile Gly Arg
 50 55 60
 Leu Leu Phe Arg Gln Phe Cys Glu Thr Arg Pro Gly Leu Glu Cys Tyr
 65 70 75 80
 Ile Gln Phe Leu Asp Ser Val Ala Glu Tyr Glu Val Thr Pro Asp Glu
 85 90 95
 Lys Leu Gly Glu Lys Gly Lys Glu Ile Met Thr Lys Tyr Leu Thr Pro
 100 105 110

Lys	Ser	Pro	Val	Phe	Ile	Ala	Gln	Val	Gly	Gln	Asp	Leu	Val	Ser	Gln	115	120	125	
Thr	Glu	Glu	Lys	Leu	Leu	Gln	Lys	Pro	Cys	Lys	Glu	Leu	Phe	Ser	Ala	130	135	140	
Cys	Ala	Gln	Ser	Val	His	Glu	Tyr	Leu	Arg	Gly	Glu	Pro	Phe	His	Glu	145	150	155	160
Tyr	Leu	Asp	Ser	Met	Phe	Phe	Asp	Arg	Phe	Leu	Gln	Trp	Lys	Trp	Leu	165	170	175	
Glu	Arg	Gln	Pro	Val	Thr	Lys	Asn	Thr	Phe	Arg	Gln	Tyr	Arg	Val	Leu	180	185	190	
Gly	Lys	Gly	Gly	Phe	Gly	Glu	Val	Cys	Ala	Cys	Gln	Val	Arg	Ala	Thr	195	200	205	
Gly	Lys	Met	Tyr	Ala	Cys	Lys	Arg	Leu	Glu	Lys	Lys	Arg	Ile	Lys	Lys	210	215	220	
Arg	Lys	Gly	Glu	Ser	Met	Ala	Leu	Asn	Glu	Lys	Gln	Ile	Leu	Glu	Lys	225	230	235	240
Val	Asn	Ser	Gln	Phe	Val	Val	Asn	Leu	Ala	Tyr	Ala	Tyr	Glu	Thr	Lys	245	250	255	
Asp	Ala	Leu	Cys	Leu	Val	Leu	Thr	Ile	Met	Asn	Gly	Gly	Asp	Leu	Lys	260	265	270	
Phe	His	Ile	Tyr	Asn	Met	Gly	Asn	Pro	Gly	Phe	Glu	Glu	Glu	Arg	Ala	275	280	285	
Leu	Phe	Tyr	Ala	Ala	Glu	Ile	Leu	Cys	Gly	Leu	Glu	Asp	Leu	His	Arg	290	295	300	
Glu	Asn	Thr	Val	Tyr	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Leu	Asp	305	310	315	320
Asp	Tyr	Gly	His	Ile	Arg	Ile	Ser	Asp	Leu	Gly	Leu	Ala	Val	Lys	Ile	325	330	335	
Pro	Glu	Gly	Asp	Leu	Ile	Arg	Gly	Arg	Val	Gly	Thr	Val	Gly	Tyr	Met	340	345	350	
Ala	Pro	Glu	Val	Leu	Asn	Asn	Gln	Arg	Tyr	Gly	Leu	Ser	Pro	Asp	Tyr	355	360	365	
Trp	Gly	Leu	Gly	Cys	Leu	Ile	Tyr	Glu	Met	Ile	Glu	Gly	Gln	Ser	Pro	370	375	380	
Phe	Arg	Gly	Arg	Lys	Glu	Lys	Val	Lys	Arg	Glu	Glu	Val	Asp	Arg	Arg	385	390	395	400
Val	Leu	Glu	Thr	Glu	Glu	Val	Tyr	Ser	His	Lys	Phe	Ser	Glu	Glu	Ala	405	410	415	

Lys Ser Ile Cys Lys Met Leu Leu Thr Lys Asp Ala Lys Gln Arg Leu
420 425 430

Gly Cys Gln Glu Glu Gly Ala Ala Glu Val Lys Arg His Pro Phe Phe
435 440 445

Arg Asn Met Asn Phe Lys Arg Leu Glu Ala Gly Met Leu Asp Pro Pro
450 455 460

Phe Val Pro Asp Pro Arg Ala Val Tyr Cys Lys Asp Val Leu Asp Ile
465 470 475 480

Glu Gln Phe Ser Thr Val Lys Gly Val Asn Leu Asp His Thr Asp Asp
485 490 495

Asp Phe Tyr Ser Lys Phe Ser Thr Gly Ser Val Ser Ile Pro Trp Gln
500 505 510

Asn Glu Met Ile Glu Thr Glu Cys Phe Lys Glu Leu Asn Val Phe Gly
515 520 525

Pro Asn Gly Thr Leu Pro Pro Asp Leu Asn Arg Asn His Pro Pro Glu
530 535 540

Pro Pro Lys Lys Gly Leu Leu Gln Arg Leu Phe Lys Arg Gln His Gln
545 550 555 560

Asn Asn Ser Lys Ser Ser Pro Ser Ser Lys Thr Ser Phe Asn His His
565 570 575

Ile Asn Ser Asn His Val Ser Ser Asn Ser Thr Gly Ser Ser
580 585 590

<210> 209

<211> 676

<212> PRT

<213> Homo sapiens

<400> 209

Met Ala Pro Phe Leu Arg Ile Ala Phe Asn Ser Tyr Glu Leu Gly Ser
1 5 10 15

Leu Gln Ala Glu Asp Glu Ala Asn Gln Pro Phe Cys Ala Val Lys Met
20 25 30

Lys Glu Ala Leu Ser Thr Glu Arg Gly Lys Thr Leu Val Gln Lys Lys
35 40 45

Pro Thr Met Tyr Pro Glu Trp Lys Ser Thr Phe Asp Ala His Ile Tyr
50 55 60

Glu Gly Arg Val Ile Gln Ile Val Leu Met Arg Ala Ala Glu Glu Pro
65 70 75 80

Val Ser Glu Val Thr Val Gly Val Ser Val Leu Ala Glu Arg Cys Lys
85 90 95

Lys	Asn	Asn	Gly	Lys	Ala	Glu	Phe	Trp	Leu	Asp	Leu	Gln	Pro	Gln	Ala
			100					105					110		
Lys	Val	Leu	Met	Ser	Val	Gln	Tyr	Phe	Leu	Glu	Asp	Val	Asp	Cys	Lys
		115					120					125			
Gln	Ser	Met	Arg	Ser	Glu	Asp	Glu	Ala	Lys	Phe	Pro	Thr	Met	Asn	Arg
	130					135					140				
Arg	Gly	Ala	Ile	Lys	Gln	Ala	Lys	Ile	His	Tyr	Ile	Lys	Asn	His	Glu
145					150					155					160
Phe	Ile	Ala	Thr	Phe	Phe	Gly	Gln	Pro	Thr	Phe	Cys	Ser	Val	Cys	Lys
				165					170					175	
Asp	Phe	Val	Trp	Gly	Leu	Asn	Lys	Gln	Gly	Tyr	Lys	Cys	Arg	Gln	Cys
			180					185					190		
Asn	Ala	Ala	Ile	His	Lys	Lys	Cys	Ile	Asp	Lys	Ile	Ile	Gly	Arg	Cys
		195					200					205			
Thr	Gly	Thr	Ala	Ala	Asn	Ser	Arg	Asp	Thr	Ile	Phe	Gln	Lys	Glu	Arg
	210					215					220				
Phe	Asn	Ile	Asp	Met	Pro	His	Arg	Phe	Lys	Val	His	Asn	Tyr	Met	Ser
225					230					235					240
Pro	Thr	Phe	Cys	Asp	His	Cys	Gly	Ser	Leu	Leu	Trp	Gly	Leu	Val	Lys
				245					250					255	
Gln	Gly	Leu	Lys	Cys	Glu	Asp	Cys	Gly	Met	Asn	Val	His	His	Lys	Cys
			260					265					270		
Arg	Glu	Lys	Val	Ala	Asn	Leu	Cys	Gly	Ile	Asn	Gln	Lys	Leu	Leu	Ala
		275					280					285			
Glu	Ala	Leu	Asn	Gln	Val	Thr	Gln	Arg	Ala	Ser	Arg	Arg	Ser	Asp	Ser
	290					295					300				
Ala	Ser	Ser	Glu	Pro	Val	Gly	Ile	Tyr	Gln	Gly	Phe	Glu	Lys	Lys	Thr
305					310					315					320
Gly	Val	Ala	Gly	Glu	Asp	Met	Gln	Asp	Asn	Ser	Gly	Thr	Tyr	Gly	Lys
				325				330						335	
Ile	Trp	Glu	Gly	Ser	Ser	Lys	Cys	Asn	Ile	Asn	Asn	Phe	Ile	Phe	His
			340					345				350			
Lys	Val	Leu	Gly	Lys	Gly	Ser	Phe	Gly	Lys	Val	Leu	Leu	Gly	Glu	Leu
		355					360					365			
Lys	Gly	Arg	Gly	Glu	Tyr	Ser	Ala	Ile	Lys	Ala	Leu	Lys	Lys	Asp	Val
	370					375					380				
Val	Leu	Ile	Asp	Asp	Asp	Val	Glu	Cys	Thr	Met	Val	Glu	Lys	Arg	Val
385					390					395					400

Leu Thr Leu Ala Ala Glu Asn Pro Phe Leu Thr His Leu Ile Cys Thr
 405 410 415
 Phe Gln Thr Lys Asp His Leu Phe Phe Val Met Glu Phe Leu Asn Gly
 420 425 430
 Gly Asp Leu Met Tyr His Ile Gln Asp Lys Gly Arg Phe Glu Leu Tyr
 435 440 445
 Arg Ala Thr Phe Tyr Ala Ala Glu Ile Met Cys Gly Leu Gln Phe Leu
 450 455 460
 His Ser Lys Gly Ile Ile Tyr Arg Asp Leu Lys Leu Asp Asn Val Leu
 465 470 475 480
 Leu Asp Arg Asp Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys
 485 490 495
 Glu Asn Ile Phe Gly Glu Ser Arg Ala Ser Thr Phe Cys Gly Thr Pro
 500 505 510
 Asp Tyr Ile Ala Pro Glu Ile Leu Gln Gly Leu Lys Tyr Thr Phe Ser
 515 520 525
 Val Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met Leu Ile Gly
 530 535 540
 Gln Ser Pro Phe His Gly Asp Asp Glu Asp Glu Leu Phe Glu Ser Ile
 545 550 555 560
 Arg Val Asp Thr Pro His Tyr Pro Arg Trp Ile Thr Lys Glu Ser Lys
 565 570 575
 Asp Ile Leu Glu Lys Leu Phe Glu Arg Glu Pro Thr Lys Arg Leu Gly
 580 585 590
 Met Thr Gly Asn Ile Lys Ile His Pro Phe Phe Lys Thr Ile Asn Trp
 595 600 605
 Thr Leu Leu Glu Lys Arg Arg Leu Glu Pro Pro Phe Arg Pro Lys Val
 610 615 620
 Lys Ser Pro Arg Asp Tyr Ser Asn Phe Asp Gln Glu Phe Leu Asn Glu
 625 630 635 640
 Lys Ala Arg Leu Ser Tyr Ser Asp Lys Asn Leu Ile Asp Ser Met Asp
 645 650 655
 Gln Ser Ala Phe Ala Gly Phe Ser Phe Val Asn Pro Lys Phe Glu His
 660 665 670
 Leu Leu Glu Asp
 675

<210> 210

<211> 406

<212> PRT
<213> Homo sapiens

<400> 210

Met	Thr	Leu	Asp	Val	Gly	Pro	Glu	Asp	Glu	Leu	Pro	Asp	Trp	Ala	Ala	
1				5					10					15		
Ala	Lys	Glu	Phe	Tyr	Gln	Lys	Tyr	Asp	Pro	Lys	Asp	Val	Ile	Gly	Arg	
		20						25					30			
Gly	Val	Ser	Ser	Val	Val	Arg	Arg	Cys	Val	His	Arg	Ala	Thr	Gly	His	
		35					40					45				
Glu	Phe	Ala	Val	Lys	Ile	Met	Glu	Val	Thr	Ala	Glu	Arg	Leu	Ser	Pro	
	50					55					60					
Glu	Gln	Leu	Glu	Glu	Val	Arg	Glu	Ala	Thr	Arg	Arg	Glu	Thr	His	Ile	
65					70					75					80	
Leu	Arg	Gln	Val	Ala	Gly	His	Pro	His	Ile	Ile	Thr	Leu	Ile	Asp	Ser	
				85					90					95		
Tyr	Glu	Ser	Ser	Ser	Phe	Met	Phe	Leu	Val	Phe	Asp	Leu	Met	Arg	Lys	
			100					105					110			
Gly	Glu	Leu	Phe	Asp	Tyr	Leu	Thr	Glu	Lys	Val	Ala	Leu	Ser	Glu	Lys	
		115					120					125				
Glu	Thr	Arg	Ser	Ile	Met	Arg	Ser	Leu	Leu	Glu	Ala	Val	Ser	Phe	Leu	
	130					135					140					
His	Ala	Asn	Asn	Ile	Val	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	
145					150					155					160	
Leu	Asp	Asp	Asn	Met	Gln	Ile	Arg	Leu	Ser	Asp	Phe	Gly	Phe	Ser	Cys	
				165					170					175		
His	Leu	Glu	Pro	Gly	Glu	Lys	Leu	Arg	Glu	Leu	Cys	Gly	Thr	Pro	Gly	
			180					185					190			
Tyr	Leu	Ala	Pro	Glu	Ile	Leu	Lys	Cys	Ser	Met	Asp	Glu	Thr	His	Pro	
		195					200					205				
Gly	Tyr	Gly	Lys	Glu	Val	Asp	Leu	Trp	Ala	Cys	Gly	Val	Ile	Leu	Phe	
	210					215					220					
Thr	Leu	Leu	Ala	Gly	Ser	Pro	Pro	Phe	Trp	His	Arg	Arg	Gln	Ile	Leu	
225					230					235					240	
Met	Leu	Arg	Met	Ile	Met	Glu	Gly	Gln	Tyr	Gln	Phe	Ser	Ser	Pro	Glu	
				245					250					255		
Trp	Asp	Asp	Arg	Ser	Ser	Thr	Val	Lys	Asp	Leu	Ile	Ser	Arg	Leu	Leu	
			260					265					270			
Gln	Val	Asp	Pro	Glu	Ala	Arg	Leu	Thr	Ala	Glu	Gln	Ala	Leu	Gln	His	

275	280	285
Pro Phe Phe Glu Arg Cys Glu Gly Ser Gln Pro Trp Asn Leu Thr Pro 290 295 300		
Arg Gln Arg Phe Arg Val Ala Val Trp Thr Val Leu Ala Ala Gly Arg 305 310 315 320		
Val Ala Leu Ser Thr His Arg Val Arg Pro Leu Thr Lys Asn Ala Leu 325 330 335		
Leu Arg Asp Pro Tyr Ala Leu Arg Ser Val Arg His Leu Ile Asp Asn 340 345 350		
Cys Ala Phe Arg Leu Tyr Gly His Trp Val Lys Lys Gly Glu Gln Gln 355 360 365		
Asn Arg Ala Ala Leu Phe Gln His Arg Pro Pro Gly Pro Phe Pro Ile 370 375 380		
Met Gly Pro Glu Glu Glu Gly Asp Ser Ala Ala Ile Thr Glu Asp Glu 385 390 395 400		
Ala Val Leu Val Leu Gly 405		

<210> 211
 <211> 1142
 <212> PRT
 <213> Homo sapiens

<400> 211

Met Ala Phe Cys Ala Lys Met Arg Ser Ser Lys Lys Thr Glu Val Asn 1 5 10 15
Leu Glu Ala Pro Glu Pro Gly Val Glu Val Ile Phe Tyr Leu Ser Asp 20 25 30
Arg Glu Pro Leu Arg Leu Gly Ser Gly Glu Tyr Thr Ala Glu Glu Leu 35 40 45
Cys Ile Arg Ala Ala Gln Ala Cys Arg Ile Ser Pro Leu Cys His Asn 50 55 60
Leu Phe Ala Leu Tyr Asp Glu Asn Thr Lys Leu Trp Tyr Ala Pro Asn 65 70 75 80
Arg Thr Ile Thr Val Asp Asp Lys Met Ser Leu Arg Leu His Tyr Arg 85 90 95
Met Arg Phe Tyr Phe Thr Asn Trp His Gly Thr Asn Asp Asn Glu Gln 100 105 110
Ser Val Trp Arg His Ser Pro Lys Lys Gln Lys Asn Gly Tyr Glu Lys 115 120 125

Lys Lys Ile Pro Asp Ala Thr Pro Leu Leu Asp Ala Ser Ser Leu Glu
 130 135 140
 Tyr Leu Phe Ala Gln Gly Gln Tyr Asp Leu Val Lys Cys Leu Ala Pro
 145 150 155 160
 Ile Arg Asp Pro Lys Thr Glu Gln Asp Gly His Asp Ile Glu Asn Glu
 165 170 175
 Cys Leu Gly Met Ala Val Leu Ala Ile Ser His Tyr Ala Met Met Lys
 180 185 190
 Lys Met Gln Leu Pro Glu Leu Pro Lys Asp Ile Ser Tyr Lys Arg Tyr
 195 200 205
 Ile Pro Glu Thr Leu Asn Lys Ser Ile Arg Gln Arg Asn Leu Leu Thr
 210 215 220
 Arg Met Arg Ile Asn Asn Val Phe Lys Asp Phe Leu Lys Glu Phe Asn
 225 230 235 240
 Asn Lys Thr Ile Cys Asp Ser Ser Val Ser Thr His Asp Leu Lys Val
 245 250 255
 Lys Tyr Leu Ala Thr Leu Glu Thr Leu Thr Lys His Tyr Gly Ala Glu
 260 265 270
 Ile Phe Glu Thr Ser Met Leu Leu Ile Ser Ser Glu Asn Glu Met Asn
 275 280 285
 Trp Phe His Ser Asn Asp Gly Gly Asn Val Leu Tyr Tyr Glu Val Met
 290 295 300
 Val Thr Gly Asn Leu Gly Ile Gln Trp Arg His Lys Pro Asn Val Val
 305 310 315 320
 Ser Val Glu Lys Glu Lys Asn Lys Leu Lys Arg Lys Lys Leu Glu Asn
 325 330 335
 Lys Asp Lys Lys Asp Glu Glu Lys Asn Lys Ile Arg Glu Glu Trp Asn
 340 345 350
 Asn Phe Ser Phe Phe Pro Glu Ile Thr His Ile Val Ile Lys Glu Ser
 355 360 365
 Val Val Ser Ile Asn Lys Gln Asp Asn Lys Lys Met Glu Leu Lys Leu
 370 375 380
 Ser Ser His Glu Glu Ala Leu Ser Phe Val Ser Leu Val Asp Gly Tyr
 385 390 395 400
 Phe Arg Leu Thr Ala Asp Ala His His Tyr Leu Cys Thr Asp Val Ala
 405 410 415
 Pro Pro Leu Ile Val His Asn Ile Gln Asn Gly Cys His Gly Pro Ile
 420 425 430

Cys	Thr	Glu	Tyr	Ala	Ile	Asn	Lys	Leu	Arg	Gln	Glu	Gly	Ser	Glu	Glu	435	440	445
Gly	Met	Tyr	Val	Leu	Arg	Trp	Ser	Cys	Thr	Asp	Phe	Asp	Asn	Ile	Leu	450	455	460
Met	Thr	Val	Thr	Cys	Phe	Glu	Lys	Ser	Glu	Gln	Val	Gln	Gly	Ala	Gln	465	470	475
Lys	Gln	Phe	Lys	Asn	Phe	Gln	Ile	Glu	Val	Gln	Lys	Gly	Arg	Tyr	Ser	485	490	495
Leu	His	Gly	Ser	Asp	Arg	Ser	Phe	Pro	Ser	Leu	Gly	Asp	Leu	Met	Ser	500	505	510
His	Leu	Lys	Lys	Gln	Ile	Leu	Arg	Thr	Asp	Asn	Ile	Ser	Phe	Met	Leu	515	520	525
Lys	Arg	Cys	Cys	Gln	Pro	Lys	Pro	Arg	Glu	Ile	Ser	Asn	Leu	Leu	Val	530	535	540
Ala	Thr	Lys	Lys	Ala	Gln	Glu	Trp	Gln	Pro	Val	Tyr	Pro	Met	Ser	Gln	545	550	555
Leu	Ser	Phe	Asp	Arg	Ile	Leu	Lys	Lys	Asp	Leu	Val	Gln	Gly	Glu	His	565	570	575
Leu	Gly	Arg	Gly	Thr	Arg	Thr	His	Ile	Tyr	Ser	Gly	Thr	Leu	Met	Asp	580	585	590
Tyr	Lys	Asp	Asp	Glu	Gly	Thr	Ser	Glu	Glu	Lys	Lys	Ile	Lys	Val	Ile	595	600	605
Leu	Lys	Val	Leu	Asp	Pro	Ser	His	Arg	Asp	Ile	Ser	Leu	Ala	Phe	Phe	610	615	620
Glu	Ala	Ala	Ser	Met	Met	Arg	Gln	Val	Ser	His	Lys	His	Ile	Val	Tyr	625	630	635
Leu	Tyr	Gly	Val	Cys	Val	Arg	Asp	Val	Glu	Asn	Ile	Met	Val	Glu	Glu	645	650	655
Phe	Val	Glu	Gly	Gly	Pro	Leu	Asp	Leu	Phe	Met	His	Arg	Lys	Ser	Asp	660	665	670
Val	Leu	Thr	Thr	Pro	Trp	Lys	Phe	Lys	Val	Ala	Lys	Gln	Leu	Ala	Ser	675	680	685
Ala	Leu	Ser	Tyr	Leu	Glu	Asp	Lys	Asp	Leu	Val	His	Gly	Asn	Val	Cys	690	695	700
Thr	Lys	Asn	Leu	Leu	Leu	Ala	Arg	Glu	Gly	Ile	Asp	Ser	Glu	Cys	Gly	705	710	715
Pro	Phe	Ile	Lys	Leu	Ser	Asp	Pro	Gly	Ile	Pro	Ile	Thr	Val	Leu	Ser	725	730	735

Arg	Gln	Glu	Cys	Ile	Glu	Arg	Ile	Pro	Trp	Ile	Ala	Pro	Glu	Cys	Val
			740						745			750			
Glu	Asp	Ser	Lys	Asn	Leu	Ser	Val	Ala	Ala	Asp	Lys	Trp	Ser	Phe	Gly
			755						760			765			
Thr	Thr	Leu	Trp	Glu	Ile	Cys	Tyr	Asn	Gly	Glu	Ile	Pro	Leu	Lys	Asp
			770						775			780			
Lys	Thr	Leu	Ile	Glu	Lys	Glu	Arg	Phe	Tyr	Glu	Ser	Arg	Cys	Arg	Pro
			785						790			795			
Val	Thr	Pro	Ser	Cys	Lys	Glu	Leu	Ala	Asp	Leu	Met	Thr	Arg	Cys	Met
			805						810			815			
Asn	Tyr	Asp	Pro	Asn	Gln	Arg	Pro	Phe	Phe	Arg	Ala	Ile	Met	Arg	Asp
			820						825			830			
Ile	Asn	Lys	Leu	Glu	Glu	Gln	Asn	Pro	Asp	Ile	Val	Ser	Arg	Lys	Lys
			835						840			845			
Asn	Gln	Pro	Thr	Glu	Val	Asp	Pro	Thr	His	Phe	Glu	Lys	Arg	Phe	Leu
			850						855			860			
Lys	Arg	Ile	Arg	Asp	Leu	Gly	Glu	Gly	His	Phe	Gly	Lys	Val	Glu	Leu
			865						870			875			
Cys	Arg	Tyr	Asp	Pro	Glu	Asp	Asn	Thr	Gly	Glu	Gln	Val	Ala	Val	Lys
			885						890			895			
Ser	Leu	Lys	Pro	Glu	Ser	Gly	Gly	Asn	His	Ile	Ala	Asp	Leu	Lys	Lys
			900						905			910			
Glu	Ile	Glu	Ile	Leu	Arg	Asn	Leu	Tyr	His	Glu	Asn	Ile	Val	Lys	Tyr
			915						920			925			
Lys	Gly	Ile	Cys	Thr	Glu	Asp	Gly	Gly	Asn	Gly	Ile	Lys	Leu	Ile	Met
			930						935			940			
Glu	Phe	Leu	Pro	Ser	Gly	Ser	Leu	Lys	Glu	Tyr	Leu	Pro	Lys	Asn	Lys
			945						950			955			
Asn	Lys	Ile	Asn	Leu	Lys	Gln	Gln	Leu	Lys	Tyr	Ala	Val	Gln	Ile	Cys
			965						970			975			
Lys	Gly	Met	Asp	Tyr	Leu	Gly	Ser	Arg	Gln	Tyr	Val	His	Arg	Asp	Leu
			980						985			990			
Ala	Ala	Arg	Asn	Val	Leu	Val	Glu	Ser	Glu	His	Gln	Val	Lys	Ile	Gly
			995						1000			1005			
Asp	Phe	Gly	Leu	Thr	Lys	Ala	Ile	Glu	Thr	Asp	Lys	Glu	Tyr	Tyr	
			1010						1015			1020			
Thr	Val	Lys	Asp	Asp	Arg	Asp	Ser	Pro	Val	Phe	Trp	Tyr	Ala	Pro	
			1025						1030			1035			

Glu Cys Leu Met Gln Ser Lys Phe Tyr Ile Ala Ser Asp Val Trp
1040 1045 1050

Ser Phe Gly Val Thr Leu His Glu Leu Leu Thr Tyr Cys Asp Ser
1055 1060 1065

Asp Ser Ser Pro Met Ala Leu Phe Leu Lys Met Ile Gly Pro Thr
1070 1075 1080

His Gly Gln Met Thr Val Thr Arg Leu Val Asn Thr Leu Lys Glu
1085 1090 1095

Gly Lys Arg Leu Pro Cys Pro Pro Asn Cys Pro Asp Glu Val Tyr
1100 1105 1110

Gln Leu Met Arg Lys Cys Trp Glu Phe Gln Pro Ser Asn Arg Thr
1115 1120 1125

Ser Phe Gln Asn Leu Ile Glu Gly Phe Glu Ala Leu Leu Lys
1130 1135 1140

<210> 212

<211> 537

<212> PRT

<213> Homo sapiens

<400> 212

Met Gly Cys Val Gln Cys Lys Asp Lys Glu Ala Thr Lys Leu Thr Glu
1 5 10 15

Glu Arg Asp Gly Ser Leu Asn Gln Ser Ser Gly Tyr Arg Tyr Gly Thr
20 25 30

Asp Pro Thr Pro Gln His Tyr Pro Ser Phe Gly Val Thr Ser Ile Pro
35 40 45

Asn Tyr Asn Asn Phe His Ala Ala Gly Gly Gln Gly Leu Thr Val Phe
50 55 60

Gly Gly Val Asn Ser Ser Ser His Thr Gly Thr Leu Arg Thr Arg Gly
65 70 75 80

Gly Thr Gly Val Thr Leu Phe Val Ala Leu Tyr Asp Tyr Glu Ala Arg
85 90 95

Thr Glu Asp Asp Leu Ser Phe His Lys Gly Glu Lys Phe Gln Ile Leu
100 105 110

Asn Ser Ser Glu Gly Asp Trp Trp Glu Ala Arg Ser Leu Thr Thr Gly
115 120 125

Glu Thr Gly Tyr Ile Pro Ser Asn Tyr Val Ala Pro Val Asp Ser Ile
130 135 140

Gln Ala Glu Glu Trp Tyr Phe Gly Lys Leu Gly Arg Lys Asp Ala Glu
145 150 155 160

Arg	Gln	Leu	Leu	Ser	Phe	Gly	Asn	Pro	Arg	Gly	Thr	Phe	Leu	Ile	Arg		
				165					170					175			
Glu	Ser	Glu	Thr	Thr	Lys	Gly	Ser	Tyr	Ser	Leu	Ser	Ile	Arg	Asp	Trp		
			180					185					190				
Asp	Asp	Met	Lys	Gly	Asp	His	Val	Lys	His	Tyr	Lys	Ile	Arg	Lys	Leu		
		195					200					205					
Asp	Asn	Gly	Gly	Tyr	Tyr	Ile	Thr	Thr	Arg	Ala	Gln	Phe	Glu	Thr	Leu		
	210					215					220						
Gln	Gln	Leu	Val	Gln	His	Tyr	Ser	Glu	Arg	Ala	Ala	Gly	Leu	Cys	Cys		
225					230					235					240		
Arg	Leu	Val	Val	Pro	Cys	His	Lys	Gly	Met	Pro	Arg	Leu	Thr	Asp	Leu		
				245					250					255			
Ser	Val	Lys	Thr	Lys	Asp	Val	Trp	Glu	Ile	Pro	Arg	Glu	Ser	Leu	Gln		
			260					265					270				
Leu	Ile	Lys	Arg	Leu	Gly	Asn	Gly	Gln	Phe	Gly	Glu	Val	Trp	Met	Gly		
		275					280					285					
Thr	Trp	Asn	Gly	Asn	Thr	Lys	Val	Ala	Ile	Lys	Thr	Leu	Lys	Pro	Gly		
	290					295					300						
Thr	Met	Ser	Pro	Glu	Ser	Phe	Leu	Glu	Glu	Ala	Gln	Ile	Met	Lys	Lys		
305					310					315					320		
Leu	Lys	His	Asp	Lys	Leu	Val	Gln	Leu	Tyr	Ala	Val	Val	Ser	Glu	Glu		
				325					330					335			
Pro	Ile	Tyr	Ile	Val	Thr	Glu	Tyr	Met	Asn	Lys	Gly	Ser	Leu	Leu	Asp		
		340						345					350				
Phe	Leu	Lys	Asp	Gly	Glu	Gly	Arg	Ala	Leu	Lys	Leu	Pro	Asn	Leu	Val		
		355					360					365					
Asp	Met	Ala	Ala	Gln	Val	Ala	Ala	Gly	Met	Ala	Tyr	Ile	Glu	Arg	Met		
	370					375					380						
Asn	Tyr	Ile	His	Arg	Asp	Leu	Arg	Ser	Ala	Asn	Ile	Leu	Val	Gly	Asn		
385					390					395					400		
Gly	Leu	Ile	Cys	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ala	Arg	Leu	Ile	Glu		
				405					410					415			
Asp	Asn	Glu	Tyr	Thr	Ala	Arg	Gln	Gly	Ala	Lys	Phe	Pro	Ile	Lys	Trp		
		420						425					430				
Thr	Ala	Pro	Glu	Arg	Ala	Leu	Tyr	Gly	Arg	Phe	Thr	Ile	Lys	Ser	Asp		
		435					440					445					
Val	Trp	Ser	Phe	Gly	Ile	Leu	Leu	Thr	Glu	Leu	Val	Thr	Lys	Gly	Arg		
	450					455					460						

Val Pro Tyr Pro Gly Met Asn Asn Arg Glu Val Leu Glu Gln Val Glu
465 470 475 480

Arg Gly Tyr Arg Met Pro Cys Pro Gln Asp Cys Pro Ile Ser Leu His
485 490 495

Glu Leu Met Ile His Cys Trp Lys Lys Asp Pro Glu Glu Arg Pro Thr
500 505 510

Phe Glu Tyr Leu Gln Ser Phe Leu Glu Asp Tyr Phe Thr Ala Thr Glu
515 520 525

Pro Gln Tyr Gln Pro Gly Glu Asn Leu
530 535

<210> 213
<211> 537
<212> PRT
<213> Homo sapiens

<400> 213

Met Gly Cys Val Gln Cys Lys Asp Lys Glu Ala Thr Lys Leu Thr Glu
1 5 10 15

Glu Arg Asp Gly Ser Leu Asn Gln Ser Ser Gly Tyr Arg Tyr Gly Thr
20 25 30

Asp Pro Thr Pro Gln His Tyr Pro Ser Phe Gly Val Thr Ser Ile Pro
35 40 45

Asn Tyr Asn Asn Phe His Ala Ala Gly Gly Gln Gly Leu Thr Val Phe
50 55 60

Gly Gly Val Asn Ser Ser Ser His Thr Gly Thr Leu Arg Thr Arg Gly
65 70 75 80

Gly Thr Gly Val Thr Leu Phe Val Ala Leu Tyr Asp Tyr Glu Ala Arg
85 90 95

Thr Glu Asp Asp Leu Ser Phe His Lys Gly Glu Lys Phe Gln Ile Leu
100 105 110

Asn Ser Ser Glu Gly Asp Trp Trp Glu Ala Arg Ser Leu Thr Thr Gly
115 120 125

Glu Thr Gly Tyr Ile Pro Ser Asn Tyr Val Ala Pro Val Asp Ser Ile
130 135 140

Gln Ala Glu Glu Trp Tyr Phe Gly Lys Leu Gly Arg Lys Asp Ala Glu
145 150 155 160

Arg Gln Leu Leu Ser Phe Gly Asn Pro Arg Gly Thr Phe Leu Ile Arg
165 170 175

Glu Ser Glu Thr Thr Lys Gly Ser Tyr Ser Leu Ser Ile Arg Asp Trp

180					185					190					
Asp	Asp	Met	Lys	Gly	Asp	His	Val	Lys	His	Tyr	Lys	Ile	Arg	Lys	Leu
		195					200					205			
Asp	Asn	Gly	Gly	Tyr	Tyr	Ile	Thr	Thr	Arg	Ala	Gln	Phe	Glu	Thr	Leu
		210					215					220			
Gln	Gln	Leu	Val	Gln	His	Tyr	Ser	Glu	Arg	Ala	Ala	Gly	Leu	Cys	Cys
		225					230					235			240
Arg	Leu	Val	Val	Pro	Cys	His	Lys	Gly	Met	Pro	Arg	Leu	Thr	Asp	Leu
				245					250					255	
Ser	Val	Lys	Thr	Lys	Asp	Val	Trp	Glu	Ile	Pro	Arg	Glu	Ser	Leu	Gln
			260					265					270		
Leu	Ile	Lys	Arg	Leu	Gly	Asn	Gly	Gln	Phe	Gly	Glu	Val	Trp	Met	Gly
		275					280					285			
Thr	Trp	Asn	Gly	Asn	Thr	Lys	Val	Ala	Ile	Lys	Thr	Leu	Lys	Pro	Gly
		290					295					300			
Thr	Met	Ser	Pro	Glu	Ser	Phe	Leu	Glu	Glu	Ala	Gln	Ile	Met	Lys	Lys
				310								315			320
Leu	Lys	His	Asp	Lys	Leu	Val	Gln	Leu	Tyr	Ala	Val	Val	Ser	Glu	Glu
				325					330					335	
Pro	Ile	Tyr	Ile	Val	Thr	Glu	Tyr	Met	Asn	Lys	Gly	Ser	Leu	Leu	Asp
			340					345					350		
Phe	Leu	Lys	Asp	Gly	Glu	Gly	Arg	Ala	Leu	Lys	Leu	Pro	Asn	Leu	Val
			355				360					365			
Asp	Met	Ala	Ala	Gln	Val	Ala	Ala	Gly	Met	Ala	Tyr	Ile	Glu	Arg	Met
		370					375					380			
Asn	Tyr	Ile	His	Arg	Asp	Leu	Arg	Ser	Ala	Asn	Ile	Leu	Val	Gly	Asn
				390					395					400	
Gly	Leu	Ile	Cys	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ala	Arg	Leu	Ile	Glu
				405					410					415	
Asp	Asn	Glu	Tyr	Thr	Ala	Arg	Gln	Gly	Ala	Lys	Phe	Pro	Ile	Lys	Trp
			420					425					430		
Thr	Ala	Pro	Glu	Arg	Ala	Leu	Tyr	Gly	Arg	Phe	Thr	Ile	Lys	Ser	Asp
			435				440					445			
Val	Trp	Ser	Phe	Gly	Ile	Leu	Leu	Thr	Glu	Leu	Val	Thr	Lys	Gly	Arg
			450				455					460			
Val	Pro	Tyr	Pro	Gly	Met	Asn	Asn	Arg	Glu	Val	Leu	Glu	Gln	Val	Glu
				470					475					480	
Arg	Gly	Tyr	Arg	Met	Pro	Cys	Pro	Gln	Asp	Cys	Pro	Ile	Ser	Leu	His

485										490					495						
Glu	Leu	Met	Ile	His	Cys	Trp	Lys	Lys	Asp	Pro	Glu	Glu	Arg	Pro	Thr						
			500						505					510							
Phe	Glu	Tyr	Leu	Gln	Ser	Phe	Leu	Glu	Asp	Tyr	Phe	Thr	Ala	Thr	Glu						
		515					520					525									
Pro	Gln	Tyr	Gln	Pro	Gly	Glu	Asn	Leu													
	530					535															
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<212> PRT																					
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Met	Ser	Ala	Ala	Val	Thr	Ala	Gly	Lys	Leu	Ala	Arg	Ala	Pro	Ala	Asp						
1				5					10					15							
Pro	Gly	Lys	Ala	Gly	Val	Pro	Gly	Val	Ala	Ala	Pro	Gly	Ala	Pro	Ala						
			20					25					30								
Ala	Ala	Pro	Pro	Ala	Lys	Glu	Ile	Pro	Glu	Val	Leu	Val	Asp	Pro	Arg						
		35					40					45									
Ser	Arg	Arg	Arg	Tyr	Val	Arg	Gly	Arg	Phe	Leu	Gly	Lys	Gly	Gly	Phe						
	50					55					60										
Ala	Lys	Cys	Phe	Glu	Ile	Ser	Asp	Val	Asp	Thr	Lys	Glu	Val	Phe	Ala						
65					70					75					80						
Gly	Lys	Ile	Val	Pro	Lys	Ser	Leu	Leu	Leu	Lys	Pro	His	Gln	Arg	Glu						
			85					90						95							
Lys	Met	Ser	Met	Glu	Ile	Ser	Ile	His	Arg	Ser	Leu	Ala	His	Gln	His						
			100					105					110								
Val	Val	Gly	Phe	His	Gly	Phe	Phe	Glu	Asp	Asn	Asp	Phe	Val	Phe	Val						
		115					120					125									
Val	Leu	Glu	Leu	Cys	Arg	Arg	Arg	Ser	Leu	Leu	Glu	Leu	His	Lys	Arg						
	130					135					140										
Arg	Lys	Ala	Leu	Thr	Glu	Pro	Glu	Ala	Arg	Tyr	Tyr	Leu	Arg	Gln	Ile						
145					150					155					160						
Val	Leu	Gly	Cys	Gln	Tyr	Leu	His	Arg	Asn	Arg	Val	Ile	His	Arg	Asp						
			165						170					175							
Leu	Lys	Leu	Gly	Asn	Leu	Phe	Leu	Asn	Glu	Asp	Leu	Glu	Val	Lys	Ile						
		180						185					190								
Gly	Asp	Phe	Gly	Leu	Ala	Thr	Lys	Val	Glu	Tyr	Asp	Gly	Glu	Arg	Lys						
	195						200					205									

Lys Thr Leu Cys Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val Leu Ser	210	215	220
Lys Lys Gly His Ser Phe Glu Val Asp Val Trp Ser Ile Gly Cys Ile	225	230	235 240
Met Tyr Thr Leu Leu Val Gly Lys Pro Pro Phe Glu Thr Ser Cys Leu	245	250	255
Lys Glu Thr Tyr Leu Arg Ile Lys Lys Asn Glu Tyr Ser Ile Pro Lys	260	265	270
His Ile Asn Pro Val Ala Ala Ser Leu Ile Gln Lys Met Leu Gln Thr	275	280	285
Asp Pro Thr Ala Arg Pro Thr Ile Asn Glu Leu Leu Gly Asp Glu Phe	290	295	300
Phe Thr Ser Gly Tyr Ile Pro Ala Arg Leu Pro Ile Thr Cys Leu Thr	305	310	315 320
Ile Pro Pro Arg Phe Ser Ile Ala Pro Ser Ser Leu Asp Pro Ser Asn	325	330	335
Arg Lys Pro Leu Thr Val Leu Asn Lys Gly Leu Glu Asn Pro Leu Pro	340	345	350
Glu Arg Pro Arg Glu Lys Glu Glu Pro Val Val Arg Glu Thr Gly Glu	355	360	365
Val Val Asp Cys His Leu Ser Asp Met Leu Gln Gln Leu His Ser Val	370	375	380
Asn Ala Ser Lys Pro Ser Glu Arg Gly Leu Val Arg Gln Glu Glu Ala	385	390	395 400
Glu Asp Pro Ala Cys Ile Pro Ile Phe Trp Val Ser Lys Trp Val Asp	405	410	415
Tyr Ser Asp Lys Tyr Gly Leu Gly Tyr Gln Leu Cys Asp Asn Ser Val	420	425	430
Gly Val Leu Phe Asn Asp Ser Thr Arg Leu Ile Leu Tyr Asn Asp Gly	435	440	445
Asp Ser Leu Gln Tyr Ile Glu Arg Asp Gly Thr Glu Ser Tyr Leu Thr	450	455	460
Val Ser Ser His Pro Asn Ser Leu Met Lys Lys Ile Thr Leu Leu Lys	465	470	475 480
Tyr Phe Arg Asn Tyr Met Ser Glu His Leu Leu Lys Ala Gly Gly Asn	485	490	495
Ile Thr Pro Arg Gln Gly Asp Glu Leu Ala Arg Leu Pro Tyr Leu Arg	500	505	510

Thr Trp Phe Arg Thr Arg Ser Ala Ile Ile Leu His Leu Ser Asn Gly
515 520 525

Ser Val Gln Ile Asn Phe Phe Gln Asp His Thr Lys Leu Ile Leu Cys
530 535 540

Pro Leu Met Ala Ala Val Thr Tyr Ile Asp Glu Lys Arg Asp Phe Arg
545 550 555 560

Thr Tyr Arg Leu Ser Leu Leu Glu Glu Tyr Gly Cys Cys Lys Glu Leu
565 570 575

Ala Ser Arg Leu Arg Tyr Ala Arg Thr Met Val Asp Lys Leu Leu Ser
580 585 590

Ser Arg Ser Ala Ser Asn Arg Leu Lys Ala Ser
595 600

<210> 215
<211> 416
<212> PRT
<213> Homo sapiens

<400> 215

Met Glu Leu Arg Val Gly Asn Lys Tyr Arg Leu Gly Arg Lys Ile Gly
1 5 10 15

Ser Gly Ser Phe Gly Asp Ile Tyr Leu Gly Ala Asn Ile Ala Ser Gly
20 25 30

Glu Glu Val Ala Ile Lys Leu Glu Cys Val Lys Thr Lys His Pro Gln
35 40 45

Leu His Ile Glu Ser Lys Phe Tyr Lys Met Met Gln Gly Gly Val Gly
50 55 60

Ile Pro Ser Ile Lys Trp Cys Gly Ala Glu Gly Asp Tyr Asn Val Met
65 70 75 80

Val Met Glu Leu Leu Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys
85 90 95

Ser Arg Lys Phe Ser Leu Lys Thr Val Leu Leu Leu Ala Asp Gln Met
100 105 110

Ile Ser Arg Ile Glu Tyr Ile His Ser Lys Asn Phe Ile His Arg Asp
115 120 125

Val Lys Pro Asp Asn Phe Leu Met Gly Leu Gly Lys Lys Gly Asn Leu
130 135 140

Val Tyr Ile Ile Asp Phe Gly Leu Ala Lys Lys Tyr Arg Asp Ala Arg
145 150 155 160

Thr His Gln His Ile Pro Tyr Arg Glu Asn Lys Asn Leu Thr Gly Thr
165 170 175

Ala Arg Tyr Ala Ser Ile Asn Thr His Leu Gly Ile Glu Gln Ser Arg
180 185 190

Arg Asp Asp Leu Glu Ser Leu Gly Tyr Val Leu Met Tyr Phe Asn Leu
195 200 205

Gly Ser Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Arg Gln Lys
210 215 220

Tyr Glu Arg Ile Ser Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu
225 230 235 240

Cys Lys Gly Tyr Pro Ser Glu Phe Ser Thr Tyr Leu Asn Phe Cys Arg
245 250 255

Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu
260 265 270

Phe Arg Asn Leu Phe His Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe
275 280 285

Asp Trp Asn Met Leu Lys Phe Gly Ala Ala Arg Asn Pro Glu Asp Val
290 295 300

Asp Arg Glu Arg Arg Glu His Glu Arg Glu Glu Arg Met Gly Gln Leu
305 310 315 320

Arg Gly Ser Ala Thr Arg Ala Leu Pro Pro Gly Pro Pro Thr Gly Ala
325 330 335

Thr Ala Asn Arg Leu Arg Ser Ala Ala Glu Pro Val Ala Ser Thr Pro
340 345 350

Ala Ser Arg Ile Gln Pro Ala Gly Asn Thr Ser Pro Arg Ala Ile Ser
355 360 365

Arg Val Asp Arg Glu Arg Lys Val Ser Met Arg Leu His Arg Gly Ala
370 375 380

Pro Ala Asn Val Ser Ser Ser Asp Leu Thr Gly Arg Gln Glu Val Ser
385 390 395 400

Arg Ile Pro Ala Ser Gln Thr Ser Val Pro Phe Asp His Leu Gly Lys
405 410 415

<210> 216

<211> 416

<212> PRT

<213> Homo sapiens

<400> 216

Met Glu Leu Arg Val Gly Asn Lys Tyr Arg Leu Gly Arg Lys Ile Gly
1 5 10 15

Ser Gly Ser Phe Gly Asp Ile Tyr Leu Gly Ala Asn Ile Ala Ser Gly

20					25					30						
Glu	Glu	Val	Ala	Ile	Lys	Leu	Glu	Cys	Val	Lys	Thr	Lys	His	Pro	Gln	
35					40					45						
Leu	His	Ile	Glu	Ser	Lys	Phe	Tyr	Lys	Met	Met	Gln	Gly	Gly	Val	Gly	
50					55					60						
Ile	Pro	Ser	Ile	Lys	Trp	Cys	Gly	Ala	Glu	Gly	Asp	Tyr	Asn	Val	Met	
65					70					75					80	
Val	Met	Glu	Leu	Leu	Gly	Pro	Ser	Leu	Glu	Asp	Leu	Phe	Asn	Phe	Cys	
					85					90					95	
Ser	Arg	Lys	Phe	Ser	Leu	Lys	Thr	Val	Leu	Leu	Leu	Ala	Asp	Gln	Met	
					100					105					110	
Ile	Ser	Arg	Ile	Glu	Tyr	Ile	His	Ser	Lys	Asn	Phe	Ile	His	Arg	Asp	
115					120					125						
Val	Lys	Pro	Asp	Asn	Phe	Leu	Met	Gly	Leu	Gly	Lys	Lys	Gly	Asn	Leu	
130					135					140						
Val	Tyr	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Lys	Lys	Tyr	Arg	Asp	Ala	Arg	
145					150					155					160	
Thr	His	Gln	His	Ile	Pro	Tyr	Arg	Glu	Asn	Lys	Asn	Leu	Thr	Gly	Thr	
					165					170					175	
Ala	Arg	Tyr	Ala	Ser	Ile	Asn	Thr	His	Leu	Gly	Ile	Glu	Gln	Ser	Arg	
180					185					190						
Arg	Asp	Asp	Leu	Glu	Ser	Leu	Gly	Tyr	Val	Leu	Met	Tyr	Phe	Asn	Leu	
195					200					205						
Gly	Ser	Leu	Pro	Trp	Gln	Gly	Leu	Lys	Ala	Ala	Thr	Lys	Arg	Gln	Lys	
210					215					220						
Tyr	Glu	Arg	Ile	Ser	Glu	Lys	Lys	Met	Ser	Thr	Pro	Ile	Glu	Val	Leu	
225					230					235					240	
Cys	Lys	Gly	Tyr	Pro	Ser	Glu	Phe	Ser	Thr	Tyr	Leu	Asn	Phe	Cys	Arg	
					245					250					255	
Ser	Leu	Arg	Phe	Asp	Asp	Lys	Pro	Asp	Tyr	Ser	Tyr	Leu	Arg	Gln	Leu	
260					265					270						
Phe	Arg	Asn	Leu	Phe	His	Arg	Gln	Gly	Phe	Ser	Tyr	Asp	Tyr	Val	Phe	
275					280					285						
Asp	Trp	Asn	Met	Leu	Lys	Phe	Gly	Ala	Ala	Arg	Asn	Pro	Glu	Asp	Val	
290					295					300						
Asp	Arg	Glu	Arg	Arg	Glu	His	Glu	Arg	Glu	Glu	Arg	Met	Gly	Gln	Leu	
305					310					315					320	
Arg	Gly	Ser	Ala	Thr	Arg	Ala	Leu	Pro	Pro	Gly	Pro	Pro	Thr	Gly	Ala	

	325		330		335										
Thr	Ala	Asn	Arg	Leu	Arg	Ser	Ala	Ala	Glu	Pro	Val	Ala	Ser	Thr	Pro
			340					345					350		
Ala	Ser	Arg	Ile	Gln	Pro	Ala	Gly	Asn	Thr	Ser	Pro	Arg	Ala	Ile	Ser
		355					360					365			
Arg	Val	Asp	Arg	Glu	Arg	Lys	Val	Ser	Met	Arg	Leu	His	Arg	Gly	Ala
	370					375					380				
Pro	Ala	Asn	Val	Ser	Ser	Ser	Asp	Leu	Thr	Gly	Arg	Gln	Glu	Val	Ser
385					390					395					400
Arg	Ile	Pro	Ala	Ser	Gln	Thr	Ser	Val	Pro	Phe	Asp	His	Leu	Gly	Lys
				405					410					415	
<210> 217															
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<212> PRT															
<213> Homo sapiens															
<400> 217															
Met	Glu	Leu	Arg	Val	Gly	Asn	Lys	Tyr	Arg	Leu	Gly	Arg	Lys	Ile	Gly
1				5					10					15	
Ser	Gly	Ser	Phe	Gly	Asp	Ile	Tyr	Leu	Gly	Ala	Asn	Ile	Ala	Ser	Gly
			20					25					30		
Glu	Glu	Val	Ala	Ile	Lys	Leu	Glu	Cys	Val	Lys	Thr	Lys	His	Pro	Gln
		35					40					45			
Leu	His	Ile	Glu	Ser	Lys	Phe	Tyr	Lys	Met	Met	Gln	Gly	Gly	Val	Gly
	50					55					60				
Ile	Pro	Ser	Ile	Lys	Trp	Cys	Gly	Ala	Glu	Gly	Asp	Tyr	Asn	Val	Met
65					70					75					80
Val	Met	Glu	Leu	Leu	Gly	Pro	Ser	Leu	Glu	Asp	Leu	Phe	Asn	Phe	Cys
			85						90					95	
Ser	Arg	Lys	Phe	Ser	Leu	Lys	Thr	Val	Leu	Leu	Leu	Ala	Asp	Gln	Met
			100					105					110		
Ile	Ser	Arg	Ile	Glu	Tyr	Ile	His	Ser	Lys	Asn	Phe	Ile	His	Arg	Asp
		115					120					125			
Val	Lys	Pro	Asp	Asn	Phe	Leu	Met	Gly	Leu	Gly	Lys	Lys	Gly	Asn	Leu
	130					135					140				
Val	Tyr	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Lys	Lys	Tyr	Arg	Asp	Ala	Arg
145					150					155					160
Thr	His	Gln	His	Ile	Pro	Tyr	Arg	Glu	Asn	Lys	Asn	Leu	Thr	Gly	Thr
				165					170					175	

Ala Arg Tyr Ala Ser Ile Asn Thr His Leu Gly Ile Glu Gln Ser Arg
180 185 190

Arg Asp Asp Leu Glu Ser Leu Gly Tyr Val Leu Met Tyr Phe Asn Leu
195 200 205

Gly Ser Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Arg Gln Lys
210 215 220

Tyr Glu Arg Ile Ser Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu
225 230 235 240

Cys Lys Gly Tyr Pro Ser Glu Phe Ser Thr Tyr Leu Asn Phe Cys Arg
245 250 255

Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu
260 265 270

Phe Arg Asn Leu Phe His Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe
275 280 285

Asp Trp Asn Met Leu Lys Phe Gly Ala Ala Arg Asn Pro Glu Asp Val
290 295 300

Asp Arg Glu Arg Arg Glu His Glu Arg Glu Glu Arg Met Gly Gln Leu
305 310 315 320

Arg Gly Ser Ala Thr Arg Ala Leu Pro Pro Gly Pro Pro Thr Gly Ala
325 330 335

Thr Ala Asn Arg Leu Arg Ser Ala Ala Glu Pro Val Ala Ser Thr Pro
340 345 350

Ala Ser Arg Ile Gln Pro Ala Gly Asn Thr Ser Pro Arg Ala Ile Ser
355 360 365

Arg Val Asp Arg Glu Arg Lys Val Ser Met Arg Leu His Arg Gly Ala
370 375 380

Pro Ala Asn Val Ser Ser Ser Asp Leu Thr Gly Arg Gln Glu Val Ser
385 390 395 400

Arg Ile Pro Ala Ser Gln Thr Ser Val Pro Phe Asp His Leu Gly Lys
405 410 415

<210> 218

<211> 418

<212> PRT

<213> Homo sapiens

<400> 218

Met Leu Pro Glu Asp Lys Glu Ala Asp Ser Leu Arg Gly Asn Ile Ser
1 5 10 15

Val Lys Ala Val Lys Lys Glu Val Glu Lys Lys Leu Arg Cys Leu Leu
20 25 30

Ala	Asp	Leu	Pro	Leu	Pro	Pro	Glu	Leu	Pro	Gly	Gly	Asp	Asp	Leu	Ser	35	40	45	
Lys	Ser	Pro	Glu	Glu	Lys	Lys	Thr	Thr	Thr	Gln	Leu	His	Ser	Lys	Arg	50	55	60	
Arg	Pro	Lys	Ile	Cys	Gly	Pro	Arg	Tyr	Gly	Glu	Thr	Lys	Glu	Lys	Asp	65	70	75	80
Ile	Asp	Trp	Gly	Lys	Leu	Cys	Val	Asp	Lys	Phe	Asp	Ile	Ile	Gly	Ile	85	90	95	
Ile	Gly	Glu	Gly	Thr	Tyr	Gly	Gln	Val	Tyr	Lys	Ala	Arg	Asp	Lys	Asp	100	105	110	
Thr	Gly	Glu	Met	Val	Ala	Leu	Lys	Lys	Val	Arg	Leu	Asp	Asn	Glu	Lys	115	120	125	
Glu	Gly	Phe	Pro	Ile	Thr	Ala	Ile	Arg	Glu	Ile	Lys	Ile	Leu	Arg	Gln	130	135	140	
Leu	Thr	His	Gln	Ser	Ile	Ile	Asn	Met	Lys	Glu	Ile	Val	Thr	Asp	Lys	145	150	155	160
Glu	Asp	Ala	Leu	Asp	Phe	Lys	Lys	Asp	Lys	Gly	Ala	Phe	Tyr	Leu	Val	165	170	175	
Phe	Glu	Tyr	Met	Asp	His	Asp	Leu	Met	Gly	Leu	Leu	Glu	Ser	Gly	Leu	180	185	190	
Val	His	Phe	Tyr	Glu	Asn	His	Ile	Lys	Ser	Phe	Met	Arg	Gln	Leu	Met	195	200	205	
Glu	Gly	Leu	Asp	Tyr	Cys	His	Lys	Lys	Asn	Phe	Leu	His	Arg	Asp	Ile	210	215	220	
Lys	Cys	Ser	Asn	Ile	Leu	Leu	Asn	Asn	Arg	Gly	Gln	Ile	Lys	Leu	Ala	225	230	235	240
Asp	Phe	Gly	Leu	Ala	Arg	Leu	Tyr	Ser	Ser	Glu	Glu	Ser	Arg	Pro	Tyr	245	250	255	
Thr	Asn	Lys	Val	Ile	Thr	Leu	Trp	Tyr	Arg	Pro	Pro	Glu	Leu	Leu	Leu	260	265	270	
Gly	Glu	Glu	Arg	Tyr	Thr	Pro	Ala	Ile	Asp	Val	Trp	Ser	Cys	Gly	Cys	275	280	285	
Ile	Leu	Gly	Glu	Leu	Phe	Thr	Lys	Lys	Pro	Ile	Phe	Gln	Ala	Asn	Gln	290	295	300	
Glu	Leu	Ala	Gln	Leu	Glu	Leu	Ile	Ser	Arg	Ile	Cys	Gly	Ser	Pro	Cys	305	310	315	320
Pro	Ala	Val	Trp	Pro	Asp	Val	Ile	Lys	Leu	Pro	Tyr	Phe	Asn	Thr	Met	325	330	335	

Lys Pro Lys Lys Gln Tyr Arg Arg Lys Leu Arg Glu Glu Phe Val Phe
340 345 350

Ile Pro Ala Ala Ala Leu Asp Leu Phe Asp Tyr Met Leu Ala Leu Asp
355 360 365

Pro Ser Lys Arg Cys Thr Ala Glu Gln Ala Leu Gln Cys Glu Phe Leu
370 375 380

Arg Asp Val Glu Pro Ser Lys Cys Leu His Gln Ile Ser Leu Tyr Gly
385 390 395 400

Lys Ile Val Met Ser Tyr Gly Val Lys Ser Glu Glu Asp Arg Ser Arg
405 410 415

Trp Ala

<210> 219

<211> 1711

<212> PRT

<213> Homo sapiens

<400> 219

Met Ser Ala Lys Val Arg Leu Lys Lys Leu Glu Gln Leu Leu Leu Asp
1 5 10 15

Gly Pro Trp Arg Asn Glu Ser Ala Leu Ser Val Glu Thr Leu Leu Asp
20 25 30

Val Leu Val Cys Leu Tyr Thr Glu Cys Ser His Ser Ala Leu Arg Arg
35 40 45

Asp Lys Tyr Val Ala Glu Phe Leu Glu Trp Ala Lys Pro Phe Thr Gln
50 55 60

Leu Val Lys Glu Met Gln Leu His Arg Glu Asp Phe Glu Ile Ile Lys
65 70 75 80

Val Ile Gly Arg Gly Ala Phe Gly Glu Val Ala Val Val Lys Met Lys
85 90 95

Asn Thr Glu Arg Ile Tyr Ala Met Lys Ile Leu Asn Lys Trp Glu Met
100 105 110

Leu Lys Arg Ala Glu Thr Ala Cys Phe Arg Glu Glu Arg Asp Val Leu
115 120 125

Val Asn Gly Asp Cys Gln Trp Ile Thr Ala Leu His Tyr Ala Phe Gln
130 135 140

Asp Glu Asn His Leu Tyr Leu Val Met Asp Tyr Tyr Val Gly Gly Asp
145 150 155 160

Leu Leu Thr Leu Leu Ser Lys Phe Glu Asp Lys Leu Pro Glu Asp Met

165										170					175				
Ala	Arg	Phe	Tyr	Ile	Gly	Glu	Met	Val	Leu	Ala	Ile	Asp	Ser	Ile	His				
			180						185					190					
Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Val	Leu	Leu				
		195					200					205							
Asp	Val	Asn	Gly	His	Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu	Lys				
	210					215					220								
Met	Asn	Asp	Asp	Gly	Thr	Val	Gln	Ser	Ser	Val	Ala	Val	Gly	Thr	Pro				
225					230					235					240				
Asp	Tyr	Ile	Ser	Pro	Glu	Ile	Leu	Gln	Ala	Met	Glu	Asp	Gly	Met	Gly				
				245					250					255					
Lys	Tyr	Gly	Pro	Glu	Cys	Asp	Trp	Trp	Ser	Leu	Gly	Val	Cys	Met	Tyr				
			260					265					270						
Glu	Met	Leu	Tyr	Gly	Glu	Thr	Pro	Phe	Tyr	Ala	Glu	Ser	Leu	Val	Glu				
		275					280					285							
Thr	Tyr	Gly	Lys	Ile	Met	Asn	His	Glu	Glu	Arg	Phe	Gln	Phe	Pro	Ser				
	290					295					300								
His	Val	Thr	Asp	Val	Ser	Glu	Glu	Ala	Lys	Asp	Leu	Ile	Gln	Arg	Leu				
305					310					315					320				
Ile	Cys	Ser	Arg	Glu	Arg	Arg	Leu	Gly	Gln	Asn	Gly	Ile	Glu	Asp	Phe				
				325				330						335					
Lys	Lys	His	Ala	Phe	Phe	Glu	Gly	Leu	Asn	Trp	Glu	Asn	Ile	Arg	Asn				
			340					345					350						
Leu	Glu	Ala	Pro	Tyr	Ile	Pro	Asp	Val	Ser	Ser	Pro	Ser	Asp	Thr	Ser				
		355					360					365							
Asn	Phe	Asp	Val	Asp	Asp	Asp	Val	Leu	Arg	Asn	Thr	Glu	Ile	Leu	Pro				
	370					375					380								
Pro	Gly	Ser	His	Thr	Gly	Phe	Ser	Gly	Leu	His	Leu	Pro	Phe	Ile	Gly				
385					390					395					400				
Phe	Thr	Phe	Thr	Thr	Glu	Ser	Cys	Phe	Ser	Asp	Arg	Gly	Ser	Leu	Lys				
				405					410					415					
Ser	Ile	Met	Gln	Ser	Asn	Thr	Leu	Thr	Lys	Asp	Glu	Asp	Val	Gln	Arg				
			420					425					430						
Asp	Leu	Glu	His	Ser	Leu	Gln	Met	Glu	Ala	Tyr	Glu	Arg	Arg	Ile	Arg				
		435					440					445							
Arg	Leu	Glu	Gln	Glu	Lys	Leu	Glu	Leu	Ser	Arg	Lys	Leu	Gln	Glu	Ser				
	450					455					460								
Thr	Gln	Thr	Val	Gln	Ser	Leu	His	Gly	Ser	Ser	Arg	Ala	Leu	Ser	Asn				

465		470		475		480
Ser Asn Arg Asp	Lys Glu Ile Lys Lys	Leu Asn Glu Glu Ile Glu Arg				
	485	490		495		
Leu Lys Asn Lys	Ile Ala Asp Ser Asn Arg	Leu Glu Arg Gln Leu Glu				
	500	505		510		
Asp Thr Val Ala	Leu Arg Gln Glu Arg Glu Asp Ser Thr	Gln Arg Leu				
	515	520		525		
Arg Gly Leu Glu	Lys Gln His Arg Val Val Arg	Gln Glu Lys Glu Glu				
	530	535		540		
Leu His Lys Gln	Leu Val Glu Ala Ser Glu Arg	Leu Lys Ser Gln Ala				
545	550	555		560		
Lys Glu Leu Lys	Asp Ala His Gln Gln Arg Lys	Leu Ala Leu Gln Glu				
	565	570		575		
Phe Ser Glu Leu	Asn Glu Arg Met Ala Glu Leu Arg	Ala Gln Lys Gln				
	580	585		590		
Lys Val Ser Arg	Gln Leu Arg Asp Lys Glu Glu Glu	Met Glu Val Ala				
	595	600		605		
Thr Gln Lys Val	Asp Ala Met Arg Gln Glu Met Arg	Arg Ala Glu Lys				
	610	615		620		
Leu Arg Lys Glu	Leu Glu Ala Gln Leu Asp Asp	Ala Val Ala Glu Ala				
625	630	635		640		
Ser Lys Glu Arg	Lys Leu Arg Glu His Ser Glu Asn	Phe Cys Lys Gln				
	645	650		655		
Met Glu Ser Glu	Leu Glu Ala Leu Lys Val Lys	Gln Gly Gly Arg Gly				
	660	665		670		
Ala Gly Ala Thr	Leu Glu His Gln Gln Glu Ile Ser	Lys Ile Lys Ser				
	675	680		685		
Glu Leu Glu Lys	Lys Val Leu Phe Tyr Glu Glu Glu	Leu Val Arg Arg				
	690	695		700		
Glu Ala Ser His	Val Leu Glu Val Lys Asn Val	Lys Lys Glu Val His				
705	710	715		720		
Asp Ser Glu Ser	His Gln Leu Ala Leu Gln Lys	Glu Ile Leu Met Leu				
	725	730		735		
Lys Asp Lys Leu	Glu Lys Ser Lys Arg Glu Arg	His Asn Glu Met Glu				
	740	745		750		
Glu Ala Val Gly	Thr Ile Lys Asp Lys Tyr Glu Arg	Glu Arg Ala Met				
	755	760		765		
Leu Phe Asp Glu	Asn Lys Lys Leu Thr Ala Glu	Asn Glu Lys Leu Cys				

770					775					780					
Ser 785	Phe	Val	Asp	Lys	Leu 790	Thr	Ala	Gln	Asn	Arg 795	Gln	Leu	Glu	Asp	Glu 800
Leu	Gln	Asp	Leu	Ala 805	Ala	Lys	Lys	Glu	Ser 810	Val	Ala	His	Trp	Glu 815	Ala
Gln	Ile	Ala	Glu 820	Ile	Ile	Gln	Trp	Val 825	Ser	Asp	Glu	Lys	Asp 830	Ala	Arg
Gly	Tyr	Leu 835	Gln	Ala	Leu	Ala	Ser 840	Lys	Met	Thr	Glu	Glu 845	Leu	Glu	Ala
Leu	Arg 850	Ser	Ser	Ser	Leu	Gly 855	Ser	Arg	Thr	Leu	Asp 860	Pro	Leu	Trp	Lys
Val 865	Arg	Arg	Ser	Gln	Lys 870	Leu	Asp	Met	Ser	Ala 875	Arg	Leu	Glu	Leu	Gln 880
Ser	Ala	Leu	Glu	Ala 885	Glu	Ile	Arg	Ala	Lys 890	Gln	Leu	Val	Gln	Glu 895	Glu
Leu	Arg	Lys	Val 900	Lys	Asp	Ala	Asn	Leu 905	Thr	Leu	Glu	Ser	Lys 910	Leu	Lys
Asp	Ser	Glu 915	Ala	Lys	Asn	Arg	Glu 920	Leu	Leu	Glu	Glu	Met 925	Glu	Ile	Leu
Lys	Lys 930	Lys	Met	Glu	Glu	Lys 935	Phe	Arg	Ala	Asp	Thr 940	Gly	Leu	Lys	Leu
Pro 945	Asp	Phe	Gln	Asp	Ser 950	Ile	Phe	Glu	Tyr	Phe 955	Asn	Thr	Ala	Pro	Leu 960
Ala	His	Asp	Leu	Thr 965	Phe	Arg	Thr	Ser	Ser 970	Ala	Ser	Glu	Gln	Glu 975	Thr
Gln	Ala	Pro	Lys 980	Pro	Glu	Ala	Ser	Pro 985	Ser	Met	Ser	Val	Ala 990	Ala	Ser
Glu	Gln 995	Gln	Glu	Asp	Met	Ala	Arg	Pro 1000	Pro	Gln	Arg	Pro	Ser 1005	Ala	Val
Pro	Leu 1010	Pro	Thr	Thr	Gln	Ala 1015	Leu	Val	Leu	Ala	Gly 1020	Pro	Lys	Pro	
Lys	Ala 1025	His	Gln	Phe	Ser	Ile 1030	Lys	Ser	Phe	Ser	Ser 1035	Pro	Thr	Gln	
Cys	Ser 1040	His	Cys	Thr	Ser	Leu 1045	Met	Val	Gly	Leu	Ile 1050	Arg	Gln	Gly	
Tyr	Ala 1055	Cys	Glu	Val	Cys	Ser 1060	Phe	Ala	Cys	His	Val 1065	Ser	Cys	Lys	
Asp	Gly	Ala	Pro	Gln	Val	Cys	Pro	Ile	Pro	Pro	Glu	Gln	Ser	Lys	

1070	1075	1080
Arg Pro Leu Gly Val Asp Val 1085	Gln Arg Gly Ile Gly 1090	Thr Ala Tyr 1095
Lys Gly His Val Lys Val Pro 1100	Lys Pro Thr Gly Val 1105	Lys Lys Gly 1110
Trp Gln Arg Ala Tyr Ala Val 1115	Val Cys Glu Cys Lys 1120	Leu Phe Leu 1125
Tyr Asp Leu Pro Glu Gly Lys 1130	Ser Thr Gln Pro Gly 1135	Val Ile Ala 1140
Ser Gln Val Leu Asp Leu Arg 1145	Asp Asp Glu Phe Ser 1150	Val Ser Ser 1155
Val Leu Ala Ser Asp Val Ile 1160	His Ala Thr Arg Arg 1165	Asp Ile Pro 1170
Cys Ile Phe Arg Val Thr Ala 1175	Ser Leu Leu Gly Ala 1180	Pro Ser Lys 1185
Thr Ser Ser Leu Leu Ile Leu 1190	Thr Glu Asn Glu Asn 1195	Glu Lys Arg 1200
Lys Trp Val Gly Ile Leu Glu 1205	Gly Leu Gln Ser Ile 1210	Leu His Lys 1215
Asn Arg Leu Arg Asn Gln Val 1220	Val His Val Pro Leu 1225	Glu Ala Tyr 1230
Asp Ser Ser Leu Pro Leu Ile 1235	Lys Ala Ile Leu Thr 1240	Ala Ala Ile 1245
Val Asp Ala Asp Arg Ile Ala 1250	Val Gly Leu Glu Glu 1255	Gly Leu Tyr 1260
Val Ile Glu Val Thr Arg Asp 1265	Val Ile Val Arg Ala 1270	Ala Asp Cys 1275
Lys Lys Val His Gln Ile Glu 1280	Leu Ala Pro Arg Glu 1285	Lys Ile Val 1290
Ile Leu Leu Cys Gly Arg Asn 1295	His His Val His Leu 1300	Tyr Pro Trp 1305
Ser Ser Leu Asp Gly Ala Glu 1310	Gly Ser Phe Asp Ile 1315	Lys Leu Pro 1320
Glu Thr Lys Gly Cys Gln Leu 1325	Met Ala Thr Ala Thr 1330	Leu Lys Arg 1335
Asn Ser Gly Thr Cys Leu Phe 1340	Val Ala Val Lys Arg 1345	Leu Ile Leu 1350
Cys Tyr Glu Ile Gln Arg Thr	Lys Pro Phe His Arg	Lys Phe Asn

1355		1360		1365
Glu Ile Val Ala Pro Gly Ser	Val Gln Cys Leu Ala	Val Leu Arg		
1370	1375	1380		
Asp Arg Leu Cys Val Gly Tyr	Pro Ser Gly Phe Cys	Leu Leu Ser		
1385	1390	1395		
Ile Gln Gly Asp Gly Gln Pro	Leu Asn Leu Val Asn	Pro Asn Asp		
1400	1405	1410		
Pro Ser Leu Ala Phe Leu Ser	Gln Gln Ser Phe Asp	Ala Leu Cys		
1415	1420	1425		
Ala Val Glu Leu Glu Ser Glu	Glu Tyr Leu Leu Cys	Phe Ser His		
1430	1435	1440		
Met Gly Leu Tyr Val Asp Pro	Gln Gly Arg Arg Ala	Arg Ala Gln		
1445	1450	1455		
Glu Leu Met Trp Pro Ala Ala	Pro Val Ala Cys Ser	Cys Ser Pro		
1460	1465	1470		
Thr His Val Thr Val Tyr Ser	Glu Tyr Gly Val Asp	Val Phe Asp		
1475	1480	1485		
Val Arg Thr Met Glu Trp Val	Gln Thr Ile Gly Leu	Arg Arg Ile		
1490	1495	1500		
Arg Pro Leu Asn Ser Glu Gly	Thr Leu Asn Leu Leu	Asn Cys Glu		
1505	1510	1515		
Pro Pro Arg Leu Ile Tyr Phe	Lys Ser Lys Phe Ser	Gly Ala Val		
1520	1525	1530		
Leu Asn Val Pro Asp Thr Ser	Asp Asn Ser Lys Lys	Gln Met Leu		
1535	1540	1545		
Arg Thr Arg Ser Lys Arg Arg	Phe Val Phe Lys Val	Pro Glu Glu		
1550	1555	1560		
Glu Arg Leu Gln Gln Arg Arg	Glu Met Leu Arg Asp	Pro Glu Leu		
1565	1570	1575		
Arg Ser Lys Met Ile Ser Asn	Pro Thr Asn Phe Asn	His Val Ala		
1580	1585	1590		
His Met Gly Pro Gly Asp Gly	Met Gln Val Leu Met	Asp Leu Pro		
1595	1600	1605		
Leu Ser Ala Val Pro Pro Ser	Gln Glu Glu Arg Pro	Gly Pro Ala		
1610	1615	1620		
Pro Thr Asn Leu Ala Arg Gln	Pro Pro Ser Arg Asn	Lys Pro Tyr		
1625	1630	1635		
Ile Ser Trp Pro Ser Ser Gly	Gly Ser Glu Pro Ser	Val Thr Val		

1640		1645		1650
Pro Leu Arg Ser Met Ser Asp	Pro Asp Gln Asp Phe	Asp Lys Glu		
1655	1660	1665		
Pro Asp Ser Asp Ser Thr Lys	His Ser Thr Pro Ser	Asn Ser Ser		
1670	1675	1680		
Asn Pro Ser Gly Pro Pro Ser	Pro Asn Ser Pro His	Arg Ser Gln		
1685	1690	1695		
Leu Pro Leu Glu Gly Leu Glu	Gln Pro Ala Cys Asp	Thr		
1700	1705	1710		

<210> 220
 <211> 1711
 <212> PRT
 <213> Homo sapiens
 <400> 220

Met Ser Ala Lys Val Arg Leu Lys Lys Leu Glu Gln Leu Leu Leu Asp
1 5 10 15
Gly Pro Trp Arg Asn Glu Ser Ala Leu Ser Val Glu Thr Leu Leu Asp
20 25 30
Val Leu Val Cys Leu Tyr Thr Glu Cys Ser His Ser Ala Leu Arg Arg
35 40 45
Asp Lys Tyr Val Ala Glu Phe Leu Glu Trp Ala Lys Pro Phe Thr Gln
50 55 60
Leu Val Lys Glu Met Gln Leu His Arg Glu Asp Phe Glu Ile Ile Lys
65 70 75 80
Val Ile Gly Arg Gly Ala Phe Gly Glu Val Ala Val Val Lys Met Lys
85 90 95
Asn Thr Glu Arg Ile Tyr Ala Met Lys Ile Leu Asn Lys Trp Glu Met
100 105 110
Leu Lys Arg Ala Glu Thr Ala Cys Phe Arg Glu Glu Arg Asp Val Leu
115 120 125
Val Asn Gly Asp Cys Gln Trp Ile Thr Ala Leu His Tyr Ala Phe Gln
130 135 140
Asp Glu Asn His Leu Tyr Leu Val Met Asp Tyr Tyr Val Gly Gly Asp
145 150 155 160
Leu Leu Thr Leu Leu Ser Lys Phe Glu Asp Lys Leu Pro Glu Asp Met
165 170 175
Ala Arg Phe Tyr Ile Gly Glu Met Val Leu Ala Ile Asp Ser Ile His
180 185 190

Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Val	Leu	Leu	195	200	205	
Asp	Val	Asn	Gly	His	Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu	Lys	210	215	220	
Met	Asn	Asp	Asp	Gly	Thr	Val	Gln	Ser	Ser	Val	Ala	Val	Gly	Thr	Pro	225	230	235	240
Asp	Tyr	Ile	Ser	Pro	Glu	Ile	Leu	Gln	Ala	Met	Glu	Asp	Gly	Met	Gly	245	250	255	
Lys	Tyr	Gly	Pro	Glu	Cys	Asp	Trp	Trp	Ser	Leu	Gly	Val	Cys	Met	Tyr	260	265	270	
Glu	Met	Leu	Tyr	Gly	Glu	Thr	Pro	Phe	Tyr	Ala	Glu	Ser	Leu	Val	Glu	275	280	285	
Thr	Tyr	Gly	Lys	Ile	Met	Asn	His	Glu	Glu	Arg	Phe	Gln	Phe	Pro	Ser	290	295	300	
His	Val	Thr	Asp	Val	Ser	Glu	Glu	Ala	Lys	Asp	Leu	Ile	Gln	Arg	Leu	305	310	315	320
Ile	Cys	Ser	Arg	Glu	Arg	Arg	Leu	Gly	Gln	Asn	Gly	Ile	Glu	Asp	Phe	325	330	335	
Lys	Lys	His	Ala	Phe	Phe	Glu	Gly	Leu	Asn	Trp	Glu	Asn	Ile	Arg	Asn	340	345	350	
Leu	Glu	Ala	Pro	Tyr	Ile	Pro	Asp	Val	Ser	Ser	Pro	Ser	Asp	Thr	Ser	355	360	365	
Asn	Phe	Asp	Val	Asp	Asp	Asp	Val	Leu	Arg	Asn	Thr	Glu	Ile	Leu	Pro	370	375	380	
Pro	Gly	Ser	His	Thr	Gly	Phe	Ser	Gly	Leu	His	Leu	Pro	Phe	Ile	Gly	385	390	395	400
Phe	Thr	Phe	Thr	Thr	Glu	Ser	Cys	Phe	Ser	Asp	Arg	Gly	Ser	Leu	Lys	405	410	415	
Ser	Ile	Met	Gln	Ser	Asn	Thr	Leu	Thr	Lys	Asp	Glu	Asp	Val	Gln	Arg	420	425	430	
Asp	Leu	Glu	His	Ser	Leu	Gln	Met	Glu	Ala	Tyr	Glu	Arg	Arg	Ile	Arg	435	440	445	
Arg	Leu	Glu	Gln	Glu	Lys	Leu	Glu	Leu	Ser	Arg	Lys	Leu	Gln	Glu	Ser	450	455	460	
Thr	Gln	Thr	Val	Gln	Ser	Leu	His	Gly	Ser	Ser	Arg	Ala	Leu	Ser	Asn	465	470	475	480
Ser	Asn	Arg	Asp	Lys	Glu	Ile	Lys	Lys	Leu	Asn	Glu	Glu	Ile	Glu	Arg	485	490	495	

Leu Lys Asn Lys Ile Ala Asp Ser Asn Arg Leu Glu Arg Gln Leu Glu	500	505	510
Asp Thr Val Ala Leu Arg Gln Glu Arg Glu Asp Ser Thr Gln Arg Leu	515	520	525
Arg Gly Leu Glu Lys Gln His Arg Val Val Arg Gln Glu Lys Glu Glu	530	535	540
Leu His Lys Gln Leu Val Glu Ala Ser Glu Arg Leu Lys Ser Gln Ala	545	550	555 560
Lys Glu Leu Lys Asp Ala His Gln Gln Arg Lys Leu Ala Leu Gln Glu	565	570	575
Phe Ser Glu Leu Asn Glu Arg Met Ala Glu Leu Arg Ala Gln Lys Gln	580	585	590
Lys Val Ser Arg Gln Leu Arg Asp Lys Glu Glu Glu Met Glu Val Ala	595	600	605
Thr Gln Lys Val Asp Ala Met Arg Gln Glu Met Arg Arg Ala Glu Lys	610	615	620
Leu Arg Lys Glu Leu Glu Ala Gln Leu Asp Asp Ala Val Ala Glu Ala	625	630	635 640
Ser Lys Glu Arg Lys Leu Arg Glu His Ser Glu Asn Phe Cys Lys Gln	645	650	655
Met Glu Ser Glu Leu Glu Ala Leu Lys Val Lys Gln Gly Gly Arg Gly	660	665	670
Ala Gly Ala Thr Leu Glu His Gln Gln Glu Ile Ser Lys Ile Lys Ser	675	680	685
Glu Leu Glu Lys Lys Val Leu Phe Tyr Glu Glu Glu Leu Val Arg Arg	690	695	700
Glu Ala Ser His Val Leu Glu Val Lys Asn Val Lys Lys Glu Val His	705	710	715 720
Asp Ser Glu Ser His Gln Leu Ala Leu Gln Lys Glu Ile Leu Met Leu	725	730	735
Lys Asp Lys Leu Glu Lys Ser Lys Arg Glu Arg His Asn Glu Met Glu	740	745	750
Glu Ala Val Gly Thr Ile Lys Asp Lys Tyr Glu Arg Glu Arg Ala Met	755	760	765
Leu Phe Asp Glu Asn Lys Lys Leu Thr Ala Glu Asn Glu Lys Leu Cys	770	775	780
Ser Phe Val Asp Lys Leu Thr Ala Gln Asn Arg Gln Leu Glu Asp Glu	785	790	795 800

Leu	Gln	Asp	Leu	Ala	Ala	Lys	Lys	Glu	Ser	Val	Ala	His	Trp	Glu	Ala	
				805					810					815		
Gln	Ile	Ala	Glu	Ile	Ile	Gln	Trp	Val	Ser	Asp	Glu	Lys	Asp	Ala	Arg	
			820					825					830			
Gly	Tyr	Leu	Gln	Ala	Leu	Ala	Ser	Lys	Met	Thr	Glu	Glu	Leu	Glu	Ala	
		835					840					845				
Leu	Arg	Ser	Ser	Ser	Leu	Gly	Ser	Arg	Thr	Leu	Asp	Pro	Leu	Trp	Lys	
	850					855					860					
Val	Arg	Arg	Ser	Gln	Lys	Leu	Asp	Met	Ser	Ala	Arg	Leu	Glu	Leu	Gln	
865					870					875					880	
Ser	Ala	Leu	Glu	Ala	Glu	Ile	Arg	Ala	Lys	Gln	Leu	Val	Gln	Glu	Glu	
				885					890					895		
Leu	Arg	Lys	Val	Lys	Asp	Ala	Asn	Leu	Thr	Leu	Glu	Ser	Lys	Leu	Lys	
		900						905					910			
Asp	Ser	Glu	Ala	Lys	Asn	Arg	Glu	Leu	Leu	Glu	Glu	Met	Glu	Ile	Leu	
		915					920					925				
Lys	Lys	Lys	Met	Glu	Glu	Lys	Phe	Arg	Ala	Asp	Thr	Gly	Leu	Lys	Leu	
	930					935					940					
Pro	Asp	Phe	Gln	Asp	Ser	Ile	Phe	Glu	Tyr	Phe	Asn	Thr	Ala	Pro	Leu	
945					950					955					960	
Ala	His	Asp	Leu	Thr	Phe	Arg	Thr	Ser	Ser	Ala	Ser	Glu	Gln	Glu	Thr	
			965					970						975		
Gln	Ala	Pro	Lys	Pro	Glu	Ala	Ser	Pro	Ser	Met	Ser	Val	Ala	Ala	Ser	
			980					985					990			
Glu	Gln	Gln	Glu	Asp	Met	Ala	Arg	Pro	Pro	Gln	Arg	Pro	Ser	Ala	Val	
		995					1000					1005				
Pro	Leu	Pro	Thr	Thr	Gln	Ala	Leu	Val	Leu	Ala	Gly	Pro	Lys	Pro		
	1010					1015					1020					
Lys	Ala	His	Gln	Phe	Ser	Ile	Lys	Ser	Phe	Ser	Ser	Pro	Thr	Gln		
	1025					1030					1035					
Cys	Ser	His	Cys	Thr	Ser	Leu	Met	Val	Gly	Leu	Ile	Arg	Gln	Gly		
	1040					1045					1050					
Tyr	Ala	Cys	Glu	Val	Cys	Ser	Phe	Ala	Cys	His	Val	Ser	Cys	Lys		
	1055					1060					1065					
Asp	Gly	Ala	Pro	Gln	Val	Cys	Pro	Ile	Pro	Pro	Glu	Gln	Ser	Lys		
	1070					1075					1080					
Arg	Pro	Leu	Gly	Val	Asp	Val	Gln	Arg	Gly	Ile	Gly	Thr	Ala	Tyr		
	1085					1090					1095					

Lys Gly	His Val	Lys Val	Pro	Lys Pro	Thr Gly	Val	Lys Lys Gly
1100			1105			1110	
Trp Gln	Arg Ala	Tyr Ala	Val	Val Cys	Glu Cys	Lys	Leu Phe Leu
1115			1120			1125	
Tyr Asp	Leu Pro	Glu Gly	Lys	Ser Thr	Gln Pro	Gly	Val Ile Ala
1130			1135			1140	
Ser Gln	Val Leu	Asp Leu	Arg	Asp Asp	Glu Phe	Ser	Val Ser Ser
1145			1150			1155	
Val Leu	Ala Ser	Asp Val	Ile	His Ala	Thr Arg	Arg	Asp Ile Pro
1160			1165			1170	
Cys Ile	Phe Arg	Val Thr	Ala	Ser Leu	Leu Gly	Ala	Pro Ser Lys
1175			1180			1185	
Thr Ser	Ser Leu	Leu Ile	Leu	Thr Glu	Asn Glu	Asn	Glu Lys Arg
1190			1195			1200	
Lys Trp	Val Gly	Ile Leu	Glu	Gly Leu	Gln Ser	Ile	Leu His Lys
1205			1210			1215	
Asn Arg	Leu Arg	Asn Gln	Val	Val His	Val Pro	Leu	Glu Ala Tyr
1220			1225			1230	
Asp Ser	Ser Leu	Pro Leu	Ile	Lys Ala	Ile Leu	Thr	Ala Ala Ile
1235			1240			1245	
Val Asp	Ala Asp	Arg Ile	Ala	Val Gly	Leu Glu	Glu	Gly Leu Tyr
1250			1255			1260	
Val Ile	Glu Val	Thr Arg	Asp	Val Ile	Val Arg	Ala	Ala Asp Cys
1265			1270			1275	
Lys Lys	Val His	Gln Ile	Glu	Leu Ala	Pro Arg	Glu	Lys Ile Val
1280			1285			1290	
Ile Leu	Leu Cys	Gly Arg	Asn	His His	Val His	Leu	Tyr Pro Trp
1295			1300			1305	
Ser Ser	Leu Asp	Gly Ala	Glu	Gly Ser	Phe Asp	Ile	Lys Leu Pro
1310			1315			1320	
Glu Thr	Lys Gly	Cys Gln	Leu	Met Ala	Thr Ala	Thr	Leu Lys Arg
1325			1330			1335	
Asn Ser	Gly Thr	Cys Leu	Phe	Val Ala	Val Lys	Arg	Leu Ile Leu
1340			1345			1350	
Cys Tyr	Glu Ile	Gln Arg	Thr	Lys Pro	Phe His	Arg	Lys Phe Asn
1355			1360			1365	
Glu Ile	Val Ala	Pro Gly	Ser	Val Gln	Cys Leu	Ala	Val Leu Arg
1370			1375			1380	

Asp	Arg	Leu	Cys	Val	Gly	Tyr	Pro	Ser	Gly	Phe	Cys	Leu	Leu	Ser
1385						1390					1395			
Ile	Gln	Gly	Asp	Gly	Gln	Pro	Leu	Asn	Leu	Val	Asn	Pro	Asn	Asp
1400						1405					1410			
Pro	Ser	Leu	Ala	Phe	Leu	Ser	Gln	Gln	Ser	Phe	Asp	Ala	Leu	Cys
1415						1420					1425			
Ala	Val	Glu	Leu	Glu	Ser	Glu	Glu	Tyr	Leu	Leu	Cys	Phe	Ser	His
1430						1435					1440			
Met	Gly	Leu	Tyr	Val	Asp	Pro	Gln	Gly	Arg	Arg	Ala	Arg	Ala	Gln
1445						1450					1455			
Glu	Leu	Met	Trp	Pro	Ala	Ala	Pro	Val	Ala	Cys	Ser	Cys	Ser	Pro
1460						1465					1470			
Thr	His	Val	Thr	Val	Tyr	Ser	Glu	Tyr	Gly	Val	Asp	Val	Phe	Asp
1475						1480					1485			
Val	Arg	Thr	Met	Glu	Trp	Val	Gln	Thr	Ile	Gly	Leu	Arg	Arg	Ile
1490						1495					1500			
Arg	Pro	Leu	Asn	Ser	Glu	Gly	Thr	Leu	Asn	Leu	Leu	Asn	Cys	Glu
1505						1510					1515			
Pro	Pro	Arg	Leu	Ile	Tyr	Phe	Lys	Ser	Lys	Phe	Ser	Gly	Ala	Val
1520						1525					1530			
Leu	Asn	Val	Pro	Asp	Thr	Ser	Asp	Asn	Ser	Lys	Lys	Gln	Met	Leu
1535						1540					1545			
Arg	Thr	Arg	Ser	Lys	Arg	Arg	Phe	Val	Phe	Lys	Val	Pro	Glu	Glu
1550						1555					1560			
Glu	Arg	Leu	Gln	Gln	Arg	Arg	Glu	Met	Leu	Arg	Asp	Pro	Glu	Leu
1565						1570					1575			
Arg	Ser	Lys	Met	Ile	Ser	Asn	Pro	Thr	Asn	Phe	Asn	His	Val	Ala
1580						1585					1590			
His	Met	Gly	Pro	Gly	Asp	Gly	Met	Gln	Val	Leu	Met	Asp	Leu	Pro
1595						1600					1605			
Leu	Ser	Ala	Val	Pro	Pro	Ser	Gln	Glu	Glu	Arg	Pro	Gly	Pro	Ala
1610						1615					1620			
Pro	Thr	Asn	Leu	Ala	Arg	Gln	Pro	Pro	Ser	Arg	Asn	Lys	Pro	Tyr
1625						1630					1635			
Ile	Ser	Trp	Pro	Ser	Ser	Gly	Gly	Ser	Glu	Pro	Ser	Val	Thr	Val
1640						1645					1650			
Pro	Leu	Arg	Ser	Met	Ser	Asp	Pro	Asp	Gln	Asp	Phe	Asp	Lys	Glu
1655						1660					1665			

Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro Ser Asn Ser Ser
1670 1675 1680

Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His Arg Ser Gln
1685 1690 1695

Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr
1700 1705 1710

<210> 221
<211> 415
<212> PRT
<213> Homo sapiens

<400> 221

Met Glu Leu Arg Val Gly Asn Arg Tyr Arg Leu Gly Arg Lys Ile Gly
1 5 10 15

Ser Gly Ser Phe Gly Asp Ile Tyr Leu Gly Thr Asp Ile Ala Ala Gly
20 25 30

Glu Glu Val Ala Ile Lys Leu Glu Cys Val Lys Thr Lys His Pro Gln
35 40 45

Leu His Ile Glu Ser Lys Ile Tyr Lys Met Met Gln Gly Gly Val Gly
50 55 60

Ile Pro Thr Ile Arg Trp Cys Gly Ala Glu Gly Asp Tyr Asn Val Met
65 70 75 80

Val Met Glu Leu Leu Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys
85 90 95

Ser Arg Lys Phe Ser Leu Lys Thr Val Leu Leu Leu Ala Asp Gln Met
100 105 110

Ile Ser Arg Ile Glu Tyr Ile His Ser Lys Asn Phe Ile His Arg Asp
115 120 125

Val Lys Pro Asp Asn Phe Leu Met Gly Leu Gly Lys Lys Gly Asn Leu
130 135 140

Val Tyr Ile Ile Asp Phe Gly Leu Ala Lys Lys Tyr Arg Asp Ala Arg
145 150 155 160

Thr His Gln His Ile Pro Tyr Arg Glu Asn Lys Asn Leu Thr Gly Thr
165 170 175

Ala Arg Tyr Ala Ser Ile Asn Thr His Leu Gly Ile Glu Gln Ser Arg
180 185 190

Arg Asp Asp Leu Glu Ser Leu Gly Tyr Val Leu Met Tyr Phe Asn Leu
195 200 205

Gly Ser Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Arg Gln Lys
210 215 220

Tyr Glu Arg Ile Ser Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu
 225 230 235 240

Cys Lys Gly Tyr Pro Ser Glu Phe Ala Thr Tyr Leu Asn Phe Cys Arg
 245 250 255

Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu
 260 265 270

Phe Arg Asn Leu Phe His Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe
 275 280 285

Asp Trp Asn Met Leu Lys Phe Gly Ala Ser Arg Ala Ala Asp Asp Ala
 290 295 300

Glu Arg Glu Arg Arg Asp Arg Glu Glu Arg Leu Arg His Ser Arg Asn
 305 310 315 320

Pro Ala Thr Arg Gly Leu Pro Ser Thr Asp Ser Gly Arg Leu Arg Gly
 325 330 335

Thr Gln Glu Val Ala Pro Pro Thr Pro Leu Thr Pro Thr Ser His Thr
 340 345 350

Ala Asn Thr Ser Pro Arg Pro Val Ser Gly Met Glu Arg Glu Arg Lys
 355 360 365

Val Ser Met Arg Leu His Arg Gly Ala Pro Val Asn Ile Ser Ser Ser
 370 375 380

Asp Leu Thr Gly Arg Gln Asp Thr Ser Arg Met Ser Thr Ser Gln Ile
 385 390 395 400

Pro Gly Arg Val Ala Ser Ser Gly Leu Gln Ser Val Val His Arg
 405 410 415

<210> 222

<211> 1169

<212> PRT

<213> Homo sapiens

<400> 222

Met Asn Met Phe Leu Tyr Phe Gln Thr Ile Ile Lys Glu Gly Met Leu
 1 5 10 15

Thr Lys Gln Asn Asn Ser Phe Gln Arg Ser Lys Arg Arg Tyr Phe Lys
 20 25 30

Leu Arg Gly Arg Thr Leu Tyr Tyr Ala Lys Thr Ala Lys Ser Ile Ile
 35 40 45

Phe Asp Glu Val Asp Leu Thr Asp Ala Ser Val Ala Glu Ser Ser Thr
 50 55 60

Lys Asn Val Asn Asn Ser Phe Thr Val Ile Thr Pro Cys Arg Lys Leu

65	70	75	80
Ile Leu Cys Ala Asp	Asn Arg Lys Glu Met	Glu Asp Trp Ile Ala Ala	
	85	90	95
Leu Lys Thr Val Gln	Asn Arg Glu His Phe	Glu Pro Thr Gln Tyr Ser	
	100	105	110
Met Asp His Phe Ser	Gly Met His Asn Trp	Tyr Ala Cys Ser His Ala	
	115	120	125
Arg Pro Thr Tyr Cys	Asn Val Cys Arg Glu	Ala Leu Ser Gly Val Thr	
	130	135	140
Ser His Gly Leu Ser	Cys Glu Val Cys Lys	Phe Lys Ala His Lys Arg	
145	150	155	160
Cys Ala Val Arg Ala	Thr Asn Asn Cys Lys	Trp Thr Thr Leu Ala Ser	
	165	170	175
Ile Gly Lys Asp Ile	Ile Glu Asp Ala Asp	Gly Ile Ala Met Pro His	
	180	185	190
Gln Trp Leu Glu Gly	Asn Leu Pro Val Ser	Ala Lys Cys Thr Val Cys	
	195	200	205
Asp Lys Thr Cys Gly	Ser Val Leu Arg Leu	Gln Asp Trp Arg Cys Leu	
	210	215	220
Trp Cys Lys Ala Met	Val His Thr Ser Cys	Lys Glu Ser Leu Leu Thr	
225	230	235	240
Lys Cys Pro Leu Gly	Leu Cys Lys Val Ser	Val Ile Pro Pro Thr Ala	
	245	250	255
Leu Asn Ser Ile Asp	Ser Asp Gly Phe Trp	Lys Ala Ser Cys Pro Pro	
	260	265	270
Ser Cys Thr Ser Pro	Leu Leu Val Phe Val	Asn Ser Lys Ser Gly Asp	
	275	280	285
Asn Gln Gly Val Lys	Phe Leu Arg Arg Phe	Lys Gln Leu Leu Asn Pro	
	290	295	300
Ala Gln Val Phe Asp	Leu Met Asn Gly Gly	Pro His Leu Gly Leu Arg	
305	310	315	320
Leu Phe Gln Lys Phe	Asp Thr Phe Arg Ile	Leu Val Cys Gly Gly Asp	
	325	330	335
Gly Ser Val Gly Trp	Val Leu Ser Glu Ile	Asp Ser Leu Asn Leu His	
	340	345	350
Lys Gln Cys Gln Leu	Gly Val Leu Pro Leu	Gly Thr Gly Asn Asp Leu	
	355	360	365
Ala Arg Val Leu Gly	Trp Gly Ser Ala Cys	Asp Asp Asp Thr Gln Leu	

370			375			380									
Pro 385	Gln	Ile	Leu	Glu	Lys 390	Leu	Glu	Arg	Ala	Ser 395	Thr	Lys	Met	Leu	Asp 400
Arg	Trp	Ser	Val	Met 405	Ala	Tyr	Glu	Ala	Lys 410	Leu	Pro	Arg	Gln	Ala 415	Ser
Ser	Ser	Thr	Val 420	Thr	Glu	Asp	Phe	Ser 425	Glu	Asp	Ser	Glu	Val 430	Gln	Gln
Ile	Leu	Phe 435	Tyr	Glu	Asp	Ser	Val 440	Ala	Ala	His	Leu	Ser 445	Lys	Ile	Leu
Thr	Ser 450	Asp	Gln	His	Ser	Val 455	Val	Ile	Ser	Ser	Ala 460	Lys	Val	Leu	Cys
Glu 465	Thr	Pro	Lys	Asp	Phe 470	Val	Ala	Arg	Val	Gly 475	Lys	Ala	Tyr	Glu	Lys 480
Thr	Thr	Glu	Ser	Ser 485	Glu	Glu	Ser	Glu	Val 490	Met	Ala	Lys	Lys	Cys 495	Ser
Val	Leu	Lys	Glu 500	Lys	Leu	Asp	Ser	Leu 505	Leu	Lys	Thr	Leu	Asp 510	Asp	Glu
Ser	Gln	Ala 515	Ser	Ser	Ser	Leu	Pro 520	Asn	Pro	Pro	Pro	Thr 525	Ile	Ala	Glu
Glu	Ala 530	Glu	Asp	Gly	Asp	Gly 535	Ser	Gly	Ser	Ile	Cys 540	Gly	Ser	Thr	Gly
Asp 545	Arg	Leu	Val	Ala	Ser 550	Ala	Cys	Pro	Ala	Arg 555	Pro	Gln	Ile	Phe	Arg 560
Pro	Arg	Glu	Gln	Leu 565	Met	Leu	Arg	Ala	Asn 570	Ser	Leu	Lys	Lys	Ala 575	Ile
Arg	Gln	Ile	Ile 580	Glu	His	Thr	Glu	Lys 585	Ala	Val	Asp	Glu	Gln 590	Asn	Ala
Gln	Thr	Gln	Glu 595	Gln	Glu	Gly	Phe 600	Val	Leu	Gly	Leu	Ser 605	Glu	Ser	Glu
Glu	Lys 610	Met	Asp	His	Arg	Val 615	Cys	Pro	Pro	Leu	Ser 620	His	Ser	Glu	Ser
Phe 625	Gly	Val	Pro	Lys	Gly 630	Arg	Ser	Gln	Arg	Lys 635	Val	Ser	Lys	Ser	Pro 640
Cys	Glu	Lys	Leu	Ile 645	Ser	Lys	Gly	Ser	Leu 650	Ser	Leu	Gly	Ser	Ser 655	Ala
Ser	Leu	Pro	Pro 660	Gln	Pro	Gly	Ser	Arg 665	Asp	Gly	Leu	Pro	Ala 670	Leu	Asn
Thr	Lys	Ile	Leu	Tyr	Pro	Asn	Val	Arg	Ala	Gly	Met	Ser	Gly	Ser	Leu

675					680					685					
Pro	Gly	Gly	Ser	Val	Ile	Ser	Arg	Leu	Leu	Ile	Asn	Ala	Asp	Pro	Phe
690						695					700				
Asn	Ser	Glu	Pro	Glu	Thr	Leu	Glu	Tyr	Tyr	Thr	Glu	Lys	Cys	Val	Met
705					710					715					720
Asn	Asn	Tyr	Phe	Gly	Ile	Gly	Leu	Asp	Ala	Lys	Ile	Ser	Leu	Asp	Phe
				725					730					735	
Asn	Asn	Lys	Arg	Asp	Glu	His	Pro	Glu	Lys	Cys	Arg	Ser	Arg	Thr	Lys
			740					745					750		
Asn	Met	Met	Trp	Tyr	Gly	Val	Leu	Gly	Thr	Lys	Glu	Leu	Leu	His	Arg
	755						760					765			
Thr	Tyr	Lys	Asn	Leu	Glu	Gln	Lys	Val	Leu	Leu	Glu	Cys	Asp	Gly	Asp
770						775					780				
Pro	Ser	His	Ser	Pro	Val	Leu	Gln	Gly	Ile	Ala	Val	Leu	Asn	Ile	Pro
785					790					795					800
Ser	Tyr	Ala	Gly	Gly	Thr	Asn	Phe	Trp	Gly	Gly	Thr	Lys	Glu	Asp	Asp
			805						810					815	
Thr	Phe	Ala	Ala	Pro	Ser	Phe	Asp	Asp	Lys	Ile	Leu	Glu	Val	Val	Ala
			820					825					830		
Val	Phe	Gly	Ser	Met	Gln	Met	Ala	Val	Ser	Arg	Val	Ile	Arg	Leu	Gln
	835						840					845			
His	His	Arg	Ile	Ala	Gln	Cys	Arg	Thr	Val	Lys	Ile	Ser	Ile	Leu	Gly
850						855					860				
Asp	Glu	Gly	Val	Pro	Val	Gln	Val	Asp	Gly	Glu	Ala	Trp	Val	Gln	Pro
865					870					875					880
Pro	Gly	Tyr	Ile	Arg	Ile	Val	His	Lys	Asn	Arg	Ala	Gln	Thr	Leu	Thr
			885						890					895	
Arg	Asp	Arg	Ala	Phe	Glu	Ser	Thr	Leu	Lys	Ser	Trp	Glu	Asp	Lys	Gln
			900					905					910		
Lys	Cys	Glu	Val	Pro	Arg	Pro	Pro	Ser	Cys	Ser	Leu	His	Pro	Glu	Met
	915						920					925			
Leu	Ser	Glu	Glu	Glu	Ala	Thr	Gln	Met	Asp	Gln	Phe	Gly	Gln	Ala	Ala
930						935					940				
Gly	Val	Leu	Ile	His	Ser	Ile	Arg	Glu	Ile	Ala	Gln	Ser	His	Arg	Asp
945					950					955					960
Met	Glu	Gln	Glu	Leu	Ala	His	Ala	Val	Asn	Ala	Ser	Ser	Lys	Ser	Met
			965						970					975	
Asp	Arg	Val	Tyr	Gly	Lys	Pro	Arg	Thr	Thr	Glu	Gly	Leu	Asn	Cys	Ser

980

985

990

Phe Val Leu Glu Met Val Asn Asn Phe Arg Ala Leu Arg Ser Glu Thr
 995 1000 1005

Glu Leu Leu Ser Gly Lys Met Ala Leu Gln Leu Asp Pro Pro Gln
 1010 1015 1020

Lys Glu Gln Leu Gly Ser Ala Leu Ala Glu Met Asp Arg Gln Leu
 1025 1030 1035

Arg Arg Leu Ala Asp Thr Pro Trp Leu Cys Gln Ser Ala Glu Pro
 1040 1045 1050

Gly Asp Glu Glu Ser Val Met Leu Asp Leu Ala Lys Arg Ser Arg
 1055 1060 1065

Ser Gly Lys Phe Arg Leu Val Thr Lys Phe Lys Lys Glu Lys Asn
 1070 1075 1080

Asn Lys Asn Lys Glu Ala His Ser Ser Leu Gly Ala Pro Val His
 1085 1090 1095

Leu Trp Gly Thr Glu Glu Val Ala Ala Trp Leu Glu His Leu Ser
 1100 1105 1110

Leu Cys Glu Tyr Lys Asp Ile Phe Thr Arg His Asp Ile Arg Gly
 1115 1120 1125

Ser Glu Leu Leu His Leu Glu Arg Arg Asp Leu Lys Asp Leu Gly
 1130 1135 1140

Val Thr Lys Val Gly His Met Lys Arg Ile Leu Cys Gly Ile Lys
 1145 1150 1155

Glu Leu Ser Arg Ser Ala Pro Ala Val Glu Ala
 1160 1165

<210> 223

<211> 480

<212> PRT

<213> Homo sapiens

<400> 223

Met Ser Asp Val Ala Ile Val Lys Glu Gly Trp Leu His Lys Arg Gly
 1 5 10 15

Glu Tyr Ile Lys Thr Trp Arg Pro Arg Tyr Phe Leu Leu Lys Asn Asp
 20 25 30

Gly Thr Phe Ile Gly Tyr Lys Glu Arg Pro Gln Asp Val Asp Gln Arg
 35 40 45

Glu Ala Pro Leu Asn Asn Phe Ser Val Ala Gln Cys Gln Leu Met Lys
 50 55 60

Thr	Glu	Arg	Pro	Arg	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp	65	70	75	80
Thr	Thr	Val	Ile	Glu	Arg	Thr	Phe	His	Val	Glu	Thr	Pro	Glu	Glu	Arg	85	90	95	
Glu	Glu	Trp	Thr	Thr	Ala	Ile	Gln	Thr	Val	Ala	Asp	Gly	Leu	Lys	Lys	100	105	110	
Gln	Glu	Glu	Glu	Glu	Met	Asp	Phe	Arg	Ser	Gly	Ser	Pro	Ser	Asp	Asn	115	120	125	
Ser	Gly	Ala	Glu	Glu	Met	Glu	Val	Ser	Leu	Ala	Lys	Pro	Lys	His	Arg	130	135	140	
Val	Thr	Met	Asn	Glu	Phe	Glu	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	145	150	155	160
Phe	Gly	Lys	Val	Ile	Leu	Val	Lys	Glu	Lys	Ala	Thr	Gly	Arg	Tyr	Tyr	165	170	175	
Ala	Met	Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Val	Ala	Lys	Asp	Glu	Val	180	185	190	
Ala	His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Asn	Ser	Arg	His	Pro	195	200	205	
Phe	Leu	Thr	Ala	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	His	Asp	Arg	Leu	Cys	210	215	220	
Phe	Val	Met	Glu	Tyr	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser	225	230	235	240
Arg	Glu	Arg	Val	Phe	Ser	Glu	Asp	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu	245	250	255	
Ile	Val	Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Glu	Lys	Asn	Val	Val	Tyr	260	265	270	
Arg	Asp	Leu	Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile	275	280	285	
Lys	Ile	Thr	Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Ile	Lys	Asp	Gly	Ala	290	295	300	
Thr	Met	Lys	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	305	310	315	320
Leu	Glu	Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	325	330	335	
Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	340	345	350	
Asp	His	Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Glu	Ile	Arg	Phe	355	360	365	

Pro Arg Thr Leu Gly Pro Glu Ala Lys Ser Leu Leu Ser Gly Leu Leu
370 375 380

Lys Lys Asp Pro Lys Gln Arg Leu Gly Gly Gly Ser Glu Asp Ala Lys
385 390 395 400

Glu Ile Met Gln His Arg Phe Phe Ala Gly Ile Val Trp Gln His Val
405 410 415

Tyr Glu Lys Lys Leu Ser Pro Pro Phe Lys Pro Gln Val Thr Ser Glu
420 425 430

Thr Asp Thr Arg Tyr Phe Asp Glu Glu Phe Thr Ala Gln Met Ile Thr
435 440 445

Ile Thr Pro Pro Asp Gln Asp Asp Ser Met Glu Cys Val Asp Ser Glu
450 455 460

Arg Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Ser Thr Ala
465 470 475 480

<210> 224
<211> 1175
<212> PRT
<213> Homo sapiens

<400> 224

Gln Val Tyr Lys Gly Arg His Val Lys Thr Gly Gln Leu Ala Ala Ile
1 5 10 15

Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu Glu Ile Lys Leu Glu
20 25 30

Ile Asn Met Leu Lys Lys Tyr Ser His His Arg Asn Ile Ala Thr Tyr
35 40 45

Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly His Asp Asp Gln Leu
50 55 60

Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser Ile Thr Asp Leu Val
65 70 75 80

Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp Trp Ile Ala Tyr Ile
85 90 95

Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu His Ile His His Val
100 105 110

Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu Leu Thr Glu Asn Ala
115 120 125

Glu Val Lys Leu Val Asp Phe Gly Val Ser Ala Gln Leu Asp Arg Thr
130 135 140

Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro Tyr Trp Met Ala Pro
145 150 155 160

Glu Val Ile Ala Cys Asp Glu Asn Pro Asp Ala Thr Tyr Asp Tyr Arg	165	170	175
Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile Glu Met Ala Glu Gly	180	185	190
Ala Pro Pro Leu Cys Asp Met His Pro Met Arg Ala Leu Phe Leu Ile	195	200	205
Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser Lys Lys Trp Ser Lys Lys	210	215	220
Phe Phe Ser Phe Ile Glu Gly Cys Leu Val Lys Asn Tyr Met Gln Arg	225	230	235
Pro Ser Thr Glu Gln Leu Leu Lys His Pro Phe Ile Arg Asp Gln Pro	245	250	255
Asn Glu Arg Gln Val Arg Ile Gln Leu Lys Asp His Ile Asp Arg Thr	260	265	270
Arg Lys Lys Arg Gly Glu Lys Asp Glu Thr Glu Tyr Glu Tyr Ser Gly	275	280	285
Ser Glu Glu Glu Glu Glu Glu Val Pro Glu Gln Glu Gly Glu Pro Ser	290	295	300
Ser Ile Val Asn Val Pro Gly Glu Ser Thr Leu Arg Arg Asp Phe Leu	305	310	315
Arg Leu Gln Gln Glu Asn Lys Glu Arg Ser Glu Ala Leu Arg Arg Gln	325	330	335
Gln Leu Leu Gln Glu Gln Gln Leu Arg Glu Gln Glu Glu Tyr Lys Arg	340	345	350
Gln Leu Leu Ala Glu Arg Gln Lys Arg Ile Glu Gln Gln Lys Glu Gln	355	360	365
Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg Glu Ala Arg Arg	370	375	380
Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu Glu Lys Arg Arg	385	390	395
Leu Glu Glu Leu Glu Arg Arg Arg Lys Glu Glu Glu Glu Arg Arg Arg	405	410	415
Ala Glu Glu Glu Lys Arg Arg Val Glu Arg Glu Gln Glu Tyr Ile Arg	420	425	430
Arg Gln Leu Glu Glu Glu Gln Arg His Leu Glu Val Leu Gln Gln Gln	435	440	445
Leu Leu Gln Glu Gln Ala Met Leu Leu His Asp His Arg Arg Pro His	450	455	460

Pro	Gln	His	Ser	Gln	Gln	Pro	Pro	Pro	Pro	Gln	Gln	Glu	Arg	Ser	Lys	465	470	475	480
Pro	Ser	Phe	His	Ala	Pro	Glu	Pro	Lys	Ala	His	Tyr	Glu	Pro	Ala	Asp	485	490		495
Arg	Ala	Arg	Glu	Val	Glu	Asp	Arg	Phe	Arg	Lys	Thr	Asn	His	Ser	Ser	500	505		510
Pro	Glu	Ala	Gln	Ser	Lys	Gln	Thr	Gly	Arg	Val	Leu	Glu	Pro	Pro	Val	515	520		525
Pro	Ser	Arg	Ser	Glu	Ser	Phe	Ser	Asn	Gly	Asn	Ser	Glu	Ser	Val	His	530	535		540
Pro	Ala	Leu	Gln	Arg	Pro	Ala	Glu	Pro	Gln	Val	Pro	Val	Arg	Thr	Thr	545	550		555
Ser	Arg	Ser	Pro	Val	Leu	Ser	Arg	Arg	Asp	Ser	Pro	Leu	Gln	Gly	Ser	565	570		575
Gly	Gln	Gln	Asn	Ser	Gln	Ala	Gly	Gln	Arg	Asn	Ser	Thr	Ser	Ser	Ile	580	585		590
Glu	Pro	Arg	Leu	Leu	Trp	Glu	Arg	Val	Glu	Lys	Leu	Val	Pro	Arg	Pro	595	600		605
Gly	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Asn	Ser	Gly	Ser	Gln	Pro	Gly	610	615		620
Ser	His	Pro	Gly	Ser	Gln	Ser	Gly	Ser	Gly	Glu	Arg	Phe	Arg	Val	Arg	625	630		635
Ser	Ser	Ser	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Gln	Arg	Leu	Glu	Asn	Ala	645	650		655
Val	Lys	Lys	Pro	Glu	Asp	Lys	Lys	Glu	Val	Phe	Arg	Pro	Leu	Lys	Pro	660	665		670
Ala	Gly	Glu	Val	Asp	Leu	Thr	Ala	Leu	Ala	Lys	Glu	Leu	Arg	Ala	Val	675	680		685
Glu	Asp	Val	Arg	Pro	Pro	His	Lys	Val	Thr	Asp	Tyr	Ser	Ser	Ser	Ser	690	695		700
Glu	Glu	Ser	Gly	Thr	Thr	Asp	Glu	Glu	Asp	Asp	Asp	Val	Glu	Gln	Glu	705	710		715
Gly	Ala	Asp	Glu	Ser	Thr	Ser	Gly	Pro	Glu	Asp	Thr	Arg	Ala	Ala	Ser	725	730		735
Ser	Leu	Asn	Leu	Ser	Asn	Gly	Glu	Thr	Glu	Ser	Val	Lys	Thr	Met	Ile	740	745		750
Val	His	Asp	Asp	Val	Glu	Ser	Glu	Pro	Ala	Met	Thr	Pro	Ser	Lys	Glu	755	760		765

Gly	Thr	Leu	Ile	Val	Arg	Gln	Thr	Gln	Ser	Ala	Ser	Ser	Thr	Leu	Gln	770	775	780
Lys	His	Lys	Ser	Ser	Ser	Ser	Phe	Thr	Pro	Phe	Ile	Asp	Pro	Arg	Leu	785	790	795
Leu	Gln	Ile	Ser	Pro	Ser	Ser	Gly	Thr	Thr	Val	Thr	Ser	Val	Val	Gly	805	810	815
Phe	Ser	Cys	Asp	Gly	Met	Arg	Pro	Glu	Ala	Ile	Arg	Gln	Asp	Pro	Thr	820	825	830
Arg	Lys	Gly	Ser	Val	Val	Asn	Val	Asn	Pro	Thr	Asn	Thr	Arg	Pro	Gln	835	840	845
Ser	Asp	Thr	Pro	Glu	Ile	Arg	Lys	Tyr	Lys	Lys	Arg	Phe	Asn	Ser	Glu	850	855	860
Ile	Leu	Cys	Ala	Ala	Leu	Trp	Gly	Val	Asn	Leu	Leu	Val	Gly	Thr	Glu	865	870	875
Ser	Gly	Leu	Met	Leu	Leu	Asp	Arg	Ser	Gly	Gln	Gly	Lys	Val	Tyr	Pro	885	890	895
Leu	Ile	Asn	Arg	Arg	Arg	Phe	Gln	Gln	Met	Asp	Val	Leu	Glu	Gly	Leu	900	905	910
Asn	Val	Leu	Val	Thr	Ile	Ser	Gly	Lys	Lys	Asp	Lys	Leu	Arg	Val	Tyr	915	920	925
Tyr	Leu	Ser	Trp	Leu	Arg	Asn	Lys	Ile	Leu	His	Asn	Asp	Pro	Glu	Val	930	935	940
Glu	Lys	Lys	Gln	Gly	Trp	Thr	Thr	Val	Gly	Asp	Leu	Glu	Gly	Cys	Val	945	950	955
His	Tyr	Lys	Val	Val	Lys	Tyr	Glu	Arg	Ile	Lys	Phe	Leu	Val	Ile	Ala	965	970	975
Leu	Lys	Ser	Ser	Val	Glu	Val	Tyr	Ala	Trp	Ala	Pro	Lys	Pro	Tyr	His	980	985	990
Lys	Phe	Met	Ala	Phe	Lys	Ser	Phe	Gly	Glu	Leu	Val	His	Lys	Pro	Leu	995	1000	1005
Leu	Val	Asp	Leu	Thr	Val	Glu	Glu	Gly	Gln	Arg	Leu	Lys	Val	Ile		1010	1015	1020
Tyr	Gly	Ser	Cys	Ala	Gly	Phe	His	Ala	Val	Asp	Val	Asp	Ser	Gly		1025	1030	1035
Ser	Val	Tyr	Asp	Ile	Tyr	Leu	Pro	Thr	His	Ile	Gln	Cys	Ser	Ile		1040	1045	1050
Lys	Pro	His	Ala	Ile	Ile	Ile	Leu	Pro	Asn	Thr	Asp	Gly	Met	Glu		1055	1060	1065

Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr Tyr
1070 1075 1080

Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro
1085 1090 1095

Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly
1100 1105 1110

Glu Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp
1115 1120 1125

Gly Val Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys
1130 1135 1140

Glu Arg Asn Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly
1145 1150 1155

Ser Ser Gln Val Tyr Phe Met Thr Leu Gly Arg Thr Ser Leu Leu
1160 1165 1170

Ser Trp
1175

<210> 225
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<400> 225

Gln Val Tyr Lys Gly Arg His Val Lys Thr Gly Gln Leu Ala Ala Ile
1 5 10 15

Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu Glu Ile Lys Leu Glu
20 25 30

Ile Asn Met Leu Lys Lys Tyr Ser His His Arg Asn Ile Ala Thr Tyr
35 40 45

Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly His Asp Asp Gln Leu
50 55 60

Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser Ile Thr Asp Leu Val
65 70 75 80

Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp Trp Ile Ala Tyr Ile
85 90 95

Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu His Ile His His Val
100 105 110

Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu Leu Thr Glu Asn Ala
115 120 125

Glu Val Lys Leu Val Asp Phe Gly Val Ser Ala Gln Leu Asp Arg Thr

130					135					140					
Val 145	Gly	Arg	Arg	Asn	Thr 150	Phe	Ile	Gly	Thr	Pro 155	Tyr	Trp	Met	Ala	Pro 160
Glu	Val	Ile	Ala	Cys 165	Asp	Glu	Asn	Pro	Asp 170	Ala	Thr	Tyr	Asp	Tyr 175	Arg
Ser	Asp	Leu	Trp 180	Ser	Cys	Gly	Ile	Thr 185	Ala	Ile	Glu	Met	Ala 190	Glu	Gly
Ala	Pro	Pro 195	Leu	Cys	Asp	Met	His 200	Pro	Met	Arg	Ala 205	Leu	Phe	Leu	Ile
Pro	Arg 210	Asn	Pro	Pro	Pro	Arg 215	Leu	Lys	Ser	Lys 220	Lys	Trp	Ser	Lys	Lys
Phe 225	Phe	Ser	Phe	Ile	Glu 230	Gly	Cys	Leu	Val	Lys 235	Asn	Tyr	Met	Gln	Arg 240
Pro	Ser	Thr	Glu	Gln 245	Leu	Leu	Lys	His	Pro 250	Phe	Ile	Arg	Asp	Gln 255	Pro
Asn	Glu	Arg	Gln 260	Val	Arg	Ile	Gln	Leu 265	Lys	Asp	His	Ile	Asp 270	Arg	Thr
Arg	Lys 275	Lys	Arg	Gly	Glu	Lys	Asp 280	Glu	Thr	Glu	Tyr 285	Glu	Tyr	Ser	Gly
Ser	Glu 290	Glu	Glu	Glu	Glu	Glu 295	Val	Pro	Glu	Gln	Glu 300	Gly	Glu	Pro	Ser
Ser 305	Ile	Val	Asn	Val	Pro 310	Gly	Glu	Ser	Thr	Leu 315	Arg	Arg	Asp	Phe	Leu 320
Arg	Leu	Gln	Gln	Glu 325	Asn	Lys	Glu	Arg	Ser 330	Glu	Ala	Leu	Arg	Arg 335	Gln
Gln	Leu	Leu	Gln 340	Glu	Gln	Gln	Leu 345	Arg	Glu	Gln	Glu	Glu	Tyr 350	Lys	Arg
Gln	Leu 355	Leu	Ala	Glu	Arg	Gln	Lys 360	Arg	Ile	Glu	Gln	Gln 365	Lys	Glu	Gln
Arg	Arg 370	Arg	Leu	Glu	Glu	Gln 375	Gln	Arg	Arg	Glu	Arg 380	Glu	Ala	Arg	Arg
Gln 385	Gln	Glu	Arg	Glu	Gln 390	Arg	Arg	Arg	Glu	Gln 395	Glu	Glu	Lys	Arg	Arg
Leu	Glu	Glu	Leu	Glu 405	Arg	Arg	Arg	Lys	Glu 410	Glu	Glu	Glu	Arg	Arg 415	Arg
Ala	Glu	Glu	Glu 420	Lys	Arg	Arg	Val	Glu 425	Arg	Glu	Gln	Glu	Tyr 430	Ile	Arg
Arg	Gln	Leu	Glu	Glu	Glu	Gln	Arg	His	Leu	Glu	Val	Leu	Gln	Gln	Gln

435					440					445					
Leu	Leu	Gln	Glu	Gln	Ala	Met	Leu	Leu	His	Asp	His	Arg	Arg	Pro	His
450						455					460				
Pro	Gln	His	Ser	Gln	Gln	Pro	Pro	Pro	Pro	Gln	Gln	Glu	Arg	Ser	Lys
465						470					475				480
Pro	Ser	Phe	His	Ala	Pro	Glu	Pro	Lys	Ala	His	Tyr	Glu	Pro	Ala	Asp
				485					490					495	
Arg	Ala	Arg	Glu	Val	Glu	Asp	Arg	Phe	Arg	Lys	Thr	Asn	His	Ser	Ser
			500					505					510		
Pro	Glu	Ala	Gln	Ser	Lys	Gln	Thr	Gly	Arg	Val	Leu	Glu	Pro	Pro	Val
		515					520					525			
Pro	Ser	Arg	Ser	Glu	Ser	Phe	Ser	Asn	Gly	Asn	Ser	Glu	Ser	Val	His
	530					535					540				
Pro	Ala	Leu	Gln	Arg	Pro	Ala	Glu	Pro	Gln	Val	Pro	Val	Arg	Thr	Thr
545						550					555				560
Ser	Arg	Ser	Pro	Val	Leu	Ser	Arg	Arg	Asp	Ser	Pro	Leu	Gln	Gly	Ser
				565					570					575	
Gly	Gln	Gln	Asn	Ser	Gln	Ala	Gly	Gln	Arg	Asn	Ser	Thr	Ser	Ser	Ile
			580					585					590		
Glu	Pro	Arg	Leu	Leu	Trp	Glu	Arg	Val	Glu	Lys	Leu	Val	Pro	Arg	Pro
	595					600					605				
Gly	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Asn	Ser	Gly	Ser	Gln	Pro	Gly
	610					615					620				
Ser	His	Pro	Gly	Ser	Gln	Ser	Gly	Ser	Gly	Glu	Arg	Phe	Arg	Val	Arg
625						630					635				640
Ser	Ser	Ser	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Gln	Arg	Leu	Glu	Asn	Ala
				645					650					655	
Val	Lys	Lys	Pro	Glu	Asp	Lys	Lys	Glu	Val	Phe	Arg	Pro	Leu	Lys	Pro
			660					665					670		
Ala	Gly	Glu	Val	Asp	Leu	Thr	Ala	Leu	Ala	Lys	Glu	Leu	Arg	Ala	Val
		675					680					685			
Glu	Asp	Val	Arg	Pro	Pro	His	Lys	Val	Thr	Asp	Tyr	Ser	Ser	Ser	Ser
	690					695					700				
Glu	Glu	Ser	Gly	Thr	Thr	Asp	Glu	Glu	Asp	Asp	Asp	Val	Glu	Gln	Glu
705						710					715				720
Gly	Ala	Asp	Glu	Ser	Thr	Ser	Gly	Pro	Glu	Asp	Thr	Arg	Ala	Ala	Ser
				725					730					735	
Ser	Leu	Asn	Leu	Ser	Asn	Gly	Glu	Thr	Glu	Ser	Val	Lys	Thr	Met	Ile

740					745					750					
Val	His	Asp	Asp	Val	Glu	Ser	Glu	Pro	Ala	Met	Thr	Pro	Ser	Lys	Glu
		755					760					765			
Gly	Thr	Leu	Ile	Val	Arg	Gln	Thr	Gln	Ser	Ala	Ser	Ser	Thr	Leu	Gln
		770					775					780			
Lys	His	Lys	Ser	Ser	Ser	Ser	Phe	Thr	Pro	Phe	Ile	Asp	Pro	Arg	Leu
		785					790					795			800
Leu	Gln	Ile	Ser	Pro	Ser	Ser	Gly	Thr	Thr	Val	Thr	Ser	Val	Val	Gly
				805					810					815	
Phe	Ser	Cys	Asp	Gly	Met	Arg	Pro	Glu	Ala	Ile	Arg	Gln	Asp	Pro	Thr
			820					825					830		
Arg	Lys	Gly	Ser	Val	Val	Asn	Val	Asn	Pro	Thr	Asn	Thr	Arg	Pro	Gln
		835					840					845			
Ser	Asp	Thr	Pro	Glu	Ile	Arg	Lys	Tyr	Lys	Lys	Arg	Phe	Asn	Ser	Glu
		850					855					860			
Ile	Leu	Cys	Ala	Ala	Leu	Trp	Gly	Val	Asn	Leu	Leu	Val	Gly	Thr	Glu
		865					870					875			880
Ser	Gly	Leu	Met	Leu	Leu	Asp	Arg	Ser	Gly	Gln	Gly	Lys	Val	Tyr	Pro
			885					890						895	
Leu	Ile	Asn	Arg	Arg	Arg	Phe	Gln	Gln	Met	Asp	Val	Leu	Glu	Gly	Leu
			900					905						910	
Asn	Val	Leu	Val	Thr	Ile	Ser	Gly	Lys	Lys	Asp	Lys	Leu	Arg	Val	Tyr
		915					920						925		
Tyr	Leu	Ser	Trp	Leu	Arg	Asn	Lys	Ile	Leu	His	Asn	Asp	Pro	Glu	Val
		930					935					940			
Glu	Lys	Lys	Gln	Gly	Trp	Thr	Thr	Val	Gly	Asp	Leu	Glu	Gly	Cys	Val
		945					950					955			960
His	Tyr	Lys	Val	Val	Lys	Tyr	Glu	Arg	Ile	Lys	Phe	Leu	Val	Ile	Ala
			965					970						975	
Leu	Lys	Ser	Ser	Val	Glu	Val	Tyr	Ala	Trp	Ala	Pro	Lys	Pro	Tyr	His
			980					985					990		
Lys	Phe	Met	Ala	Phe	Lys	Ser	Phe	Gly	Glu	Leu	Val	His	Lys	Pro	Leu
		995					1000					1005			
Leu	Val	Asp	Leu	Thr	Val	Glu	Glu	Gly	Gln	Arg	Leu	Lys	Val	Ile	
		1010					1015					1020			
Tyr	Gly	Ser	Cys	Ala	Gly	Phe	His	Ala	Val	Asp	Val	Asp	Ser	Gly	
		1025					1030					1035			
Ser	Val	Tyr	Asp	Ile	Tyr	Leu	Pro	Thr	His	Ile	Gln	Cys	Ser	Ile	

1040	1045	1050
Lys Pro His Ala Ile Ile Ile	Leu Pro Asn Thr Asp	Gly Met Glu
1055	1060	1065
Leu Leu Val Cys Tyr Glu Asp	Glu Gly Val Tyr Val	Asn Thr Tyr
1070	1075	1080
Gly Arg Ile Thr Lys Asp Val	Val Leu Gln Trp Gly	Glu Met Pro
1085	1090	1095
Thr Ser Val Ala Tyr Ile Arg	Ser Asn Gln Thr Met	Gly Trp Gly
1100	1105	1110
Glu Lys Ala Ile Glu Ile Arg	Ser Val Glu Thr Gly	His Leu Asp
1115	1120	1125
Gly Val Phe Met His Lys Arg	Ala Gln Arg Leu Lys	Phe Leu Cys
1130	1135	1140
Glu Arg Asn Asp Lys Val Phe	Phe Ala Ser Val Arg	Ser Gly Gly
1145	1150	1155
Ser Ser Gln Val Tyr Phe Met	Thr Leu Gly Arg Thr	Ser Leu Leu
1160	1165	1170
Ser Trp		
1175		
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Gln Val Tyr Lys Gly Arg His Val Lys Thr Gly Gln Leu Ala Ala Ile		
1 5 10 15		
Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu Glu Ile Lys Leu Glu		
20 25 30		
Ile Asn Met Leu Lys Lys Tyr Ser His His Arg Asn Ile Ala Thr Tyr		
35 40 45		
Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly His Asp Asp Gln Leu		
50 55 60		
Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser Ile Thr Asp Leu Val		
65 70 75 80		
Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp Trp Ile Ala Tyr Ile		
85 90 95		
Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu His Ile His His Val		
100 105 110		

Ile	His	Arg	Asp	Ile	Lys	Gly	Gln	Asn	Val	Leu	Leu	Thr	Glu	Asn	Ala		
		115					120						125				
Glu	Val	Lys	Leu	Val	Asp	Phe	Gly	Val	Ser	Ala	Gln	Leu	Asp	Arg	Thr		
		130				135						140					
Val	Gly	Arg	Arg	Asn	Thr	Phe	Ile	Gly	Thr	Pro	Tyr	Trp	Met	Ala	Pro		
145					150					155					160		
Glu	Val	Ile	Ala	Cys	Asp	Glu	Asn	Pro	Asp	Ala	Thr	Tyr	Asp	Tyr	Arg		
				165					170						175		
Ser	Asp	Leu	Trp	Ser	Cys	Gly	Ile	Thr	Ala	Ile	Glu	Met	Ala	Glu	Gly		
		180						185					190				
Ala	Pro	Pro	Leu	Cys	Asp	Met	His	Pro	Met	Arg	Ala	Leu	Phe	Leu	Ile		
		195					200						205				
Pro	Arg	Asn	Pro	Pro	Pro	Arg	Leu	Lys	Ser	Lys	Lys	Trp	Ser	Lys	Lys		
		210				215						220					
Phe	Phe	Ser	Phe	Ile	Glu	Gly	Cys	Leu	Val	Lys	Asn	Tyr	Met	Gln	Arg		
225					230					235					240		
Pro	Ser	Thr	Glu	Gln	Leu	Leu	Lys	His	Pro	Phe	Ile	Arg	Asp	Gln	Pro		
				245					250					255			
Asn	Glu	Arg	Gln	Val	Arg	Ile	Gln	Leu	Lys	Asp	His	Ile	Asp	Arg	Thr		
			260					265					270				
Arg	Lys	Lys	Arg	Gly	Glu	Lys	Asp	Glu	Thr	Glu	Tyr	Glu	Tyr	Ser	Gly		
		275					280					285					
Ser	Glu	Glu	Glu	Glu	Glu	Glu	Val	Pro	Glu	Gln	Glu	Gly	Glu	Pro	Ser		
		290				295					300						
Ser	Ile	Val	Asn	Val	Pro	Gly	Glu	Ser	Thr	Leu	Arg	Arg	Asp	Phe	Leu		
305				310						315					320		
Arg	Leu	Gln	Gln	Glu	Asn	Lys	Glu	Arg	Ser	Glu	Ala	Leu	Arg	Arg	Gln		
				325					330					335			
Gln	Leu	Leu	Gln	Glu	Gln	Gln	Leu	Arg	Glu	Gln	Glu	Glu	Tyr	Lys	Arg		
			340					345					350				
Gln	Leu	Leu	Ala	Glu	Arg	Gln	Lys	Arg	Ile	Glu	Gln	Gln	Lys	Glu	Gln		
		355					360					365					
Arg	Arg	Arg	Leu	Glu	Glu	Gln	Gln	Arg	Arg	Glu	Arg	Glu	Ala	Arg	Arg		
		370				375					380						
Gln	Gln	Glu	Arg	Glu	Gln	Arg	Arg	Arg	Glu	Gln	Glu	Glu	Lys	Arg	Arg		
385					390					395					400		
Leu	Glu	Glu	Leu	Glu	Arg	Arg	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Arg	Arg		
				405					410					415			

Ala	Glu	Glu	Glu	Lys	Arg	Arg	Val	Glu	Arg	Glu	Gln	Glu	Tyr	Ile	Arg	420	425	430	
Arg	Gln	Leu	Glu	Glu	Glu	Gln	Arg	His	Leu	Glu	Val	Leu	Gln	Gln	Gln	435	440	445	
Leu	Leu	Gln	Glu	Gln	Ala	Met	Leu	Leu	His	Asp	His	Arg	Arg	Pro	His	450	455	460	
Pro	Gln	His	Ser	Gln	Gln	Pro	Pro	Pro	Pro	Gln	Gln	Glu	Arg	Ser	Lys	465	470	475	480
Pro	Ser	Phe	His	Ala	Pro	Glu	Pro	Lys	Ala	His	Tyr	Glu	Pro	Ala	Asp	485	490	495	
Arg	Ala	Arg	Glu	Val	Glu	Asp	Arg	Phe	Arg	Lys	Thr	Asn	His	Ser	Ser	500	505	510	
Pro	Glu	Ala	Gln	Ser	Lys	Gln	Thr	Gly	Arg	Val	Leu	Glu	Pro	Pro	Val	515	520	525	
Pro	Ser	Arg	Ser	Glu	Ser	Phe	Ser	Asn	Gly	Asn	Ser	Glu	Ser	Val	His	530	535	540	
Pro	Ala	Leu	Gln	Arg	Pro	Ala	Glu	Pro	Gln	Val	Pro	Val	Arg	Thr	Thr	545	550	555	560
Ser	Arg	Ser	Pro	Val	Leu	Ser	Arg	Arg	Asp	Ser	Pro	Leu	Gln	Gly	Ser	565	570	575	
Gly	Gln	Gln	Asn	Ser	Gln	Ala	Gly	Gln	Arg	Asn	Ser	Thr	Ser	Ser	Ile	580	585	590	
Glu	Pro	Arg	Leu	Leu	Trp	Glu	Arg	Val	Glu	Lys	Leu	Val	Pro	Arg	Pro	595	600	605	
Gly	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Asn	Ser	Gly	Ser	Gln	Pro	Gly	610	615	620	
Ser	His	Pro	Gly	Ser	Gln	Ser	Gly	Ser	Gly	Glu	Arg	Phe	Arg	Val	Arg	625	630	635	640
Ser	Ser	Ser	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Gln	Arg	Leu	Glu	Asn	Ala	645	650	655	
Val	Lys	Lys	Pro	Glu	Asp	Lys	Lys	Glu	Val	Phe	Arg	Pro	Leu	Lys	Pro	660	665	670	
Ala	Gly	Glu	Val	Asp	Leu	Thr	Ala	Leu	Ala	Lys	Glu	Leu	Arg	Ala	Val	675	680	685	
Glu	Asp	Val	Arg	Pro	Pro	His	Lys	Val	Thr	Asp	Tyr	Ser	Ser	Ser	Ser	690	695	700	
Glu	Glu	Ser	Gly	Thr	Thr	Asp	Glu	Glu	Asp	Asp	Asp	Val	Glu	Gln	Glu	705	710	715	720

Gly	Ala	Asp	Glu	Ser	Thr	Ser	Gly	Pro	Glu	Asp	Thr	Arg	Ala	Ala	Ser	
				725					730					735		
Ser	Leu	Asn	Leu	Ser	Asn	Gly	Glu	Thr	Glu	Ser	Val	Lys	Thr	Met	Ile	
			740					745					750			
Val	His	Asp	Asp	Val	Glu	Ser	Glu	Pro	Ala	Met	Thr	Pro	Ser	Lys	Glu	
		755					760					765				
Gly	Thr	Leu	Ile	Val	Arg	Gln	Thr	Gln	Ser	Ala	Ser	Ser	Thr	Leu	Gln	
	770					775						780				
Lys	His	Lys	Ser	Ser	Ser	Ser	Phe	Thr	Pro	Phe	Ile	Asp	Pro	Arg	Leu	
785					790					795					800	
Leu	Gln	Ile	Ser	Pro	Ser	Ser	Gly	Thr	Thr	Val	Thr	Ser	Val	Val	Gly	
				805					810							
Phe	Ser	Cys	Asp	Gly	Met	Arg	Pro	Glu	Ala	Ile	Arg	Gln	Asp	Pro	Thr	
			820					825					830			
Arg	Lys	Gly	Ser	Val	Val	Asn	Val	Asn	Pro	Thr	Asn	Thr	Arg	Pro	Gln	
		835					840					845				
Ser	Asp	Thr	Pro	Glu	Ile	Arg	Lys	Tyr	Lys	Lys	Arg	Phe	Asn	Ser	Glu	
	850					855					860					
Ile	Leu	Cys	Ala	Ala	Leu	Trp	Gly	Val	Asn	Leu	Leu	Val	Gly	Thr	Glu	
865					870					875					880	
Ser	Gly	Leu	Met	Leu	Leu	Asp	Arg	Ser	Gly	Gln	Gly	Lys	Val	Tyr	Pro	
				885					890					895		
Leu	Ile	Asn	Arg	Arg	Arg	Phe	Gln	Gln	Met	Asp	Val	Leu	Glu	Gly	Leu	
			900					905					910			
Asn	Val	Leu	Val	Thr	Ile	Ser	Gly	Lys	Lys	Asp	Lys	Leu	Arg	Val	Tyr	
		915					920					925				
Tyr	Leu	Ser	Trp	Leu	Arg	Asn	Lys	Ile	Leu	His	Asn	Asp	Pro	Glu	Val	
	930					935					940					
Glu	Lys	Lys	Gln	Gly	Trp	Thr	Thr	Val	Gly	Asp	Leu	Glu	Gly	Cys	Val	
945					950					955					960	
His	Tyr	Lys	Val	Val	Lys	Tyr	Glu	Arg	Ile	Lys	Phe	Leu	Val	Ile	Ala	
				965					970					975		
Leu	Lys	Ser	Ser	Val	Glu	Val	Tyr	Ala	Trp	Ala	Pro	Lys	Pro	Tyr	His	
			980					985					990			
Lys	Phe	Met	Ala	Phe	Lys	Ser	Phe	Gly	Glu	Leu	Val	His	Lys	Pro	Leu	
		995					1000					1005				
Leu	Val	Asp	Leu	Thr	Val	Glu	Glu	Gly	Gln	Arg	Leu	Lys	Val	Ile		
	1010					1015					1020					

Tyr Gly Ser Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly
 1025 1030 1035
 Ser Val Tyr Asp Ile Tyr Leu Pro Thr His Ile Gln Cys Ser Ile
 1040 1045 1050
 Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly Met Glu
 1055 1060 1065
 Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr Tyr
 1070 1075 1080
 Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro
 1085 1090 1095
 Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly
 1100 1105 1110
 Glu Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp
 1115 1120 1125
 Gly Val Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys
 1130 1135 1140
 Glu Arg Asn Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly
 1145 1150 1155
 Ser Ser Gln Val Tyr Phe Met Thr Leu Gly Arg Thr Ser Leu Leu
 1160 1165 1170
 Ser Trp
 1175

<210> 227
 <211> 983
 <212> PRT
 <213> Homo sapiens

<400> 227

Met Asp Cys Gln Leu Ser Ile Leu Leu Leu Leu Ser Cys Ser Val Leu
 1 5 10 15
 Asp Ser Phe Gly Glu Leu Ile Pro Gln Pro Ser Asn Glu Val Asn Leu
 20 25 30
 Leu Asp Ser Lys Thr Ile Gln Gly Glu Leu Gly Trp Ile Ser Tyr Pro
 35 40 45
 Ser His Gly Trp Glu Glu Ile Ser Gly Val Asp Glu His Tyr Thr Pro
 50 55 60
 Ile Arg Thr Tyr Gln Val Cys Asn Val Met Asp His Ser Gln Asn Asn
 65 70 75 80
 Trp Leu Arg Thr Asn Trp Val Pro Arg Asn Ser Ala Gln Lys Ile Tyr
 85 90 95

Val	Glu	Leu	Lys	Phe	Thr	Leu	Arg	Asp	Cys	Asn	Ser	Ile	Pro	Leu	Val	100	105	110	
Leu	Gly	Thr	Cys	Lys	Glu	Thr	Phe	Asn	Leu	Tyr	Tyr	Met	Glu	Ser	Asp	115	120	125	
Asp	Asp	His	Gly	Val	Lys	Phe	Arg	Glu	His	Gln	Phe	Thr	Lys	Ile	Asp	130	135	140	
Thr	Ile	Ala	Ala	Asp	Glu	Ser	Phe	Thr	Gln	Met	Asp	Leu	Gly	Asp	Arg	145	150	155	160
Ile	Leu	Lys	Leu	Asn	Thr	Glu	Ile	Arg	Glu	Val	Gly	Pro	Val	Asn	Lys	165	170	175	
Lys	Gly	Phe	Tyr	Leu	Ala	Phe	Gln	Asp	Val	Gly	Ala	Cys	Val	Ala	Leu	180	185	190	
Val	Ser	Val	Arg	Val	Tyr	Phe	Lys	Lys	Cys	Pro	Phe	Thr	Val	Lys	Asn	195	200	205	
Leu	Ala	Met	Phe	Pro	Asp	Thr	Val	Pro	Met	Asp	Ser	Gln	Ser	Leu	Val	210	215	220	
Glu	Val	Arg	Gly	Ser	Cys	Val	Asn	Asn	Ser	Lys	Glu	Glu	Asp	Pro	Pro	225	230	235	240
Arg	Met	Tyr	Cys	Ser	Thr	Glu	Gly	Glu	Trp	Leu	Val	Pro	Ile	Gly	Lys	245	250	255	
Cys	Ser	Cys	Asn	Ala	Gly	Tyr	Glu	Glu	Arg	Gly	Phe	Met	Cys	Gln	Ala	260	265	270	
Cys	Arg	Pro	Gly	Phe	Tyr	Lys	Ala	Leu	Asp	Gly	Asn	Met	Lys	Cys	Ala	275	280	285	
Lys	Cys	Pro	Pro	His	Ser	Ser	Thr	Gln	Glu	Asp	Gly	Ser	Met	Asn	Cys	290	295	300	
Arg	Cys	Glu	Asn	Asn	Tyr	Phe	Arg	Ala	Asp	Lys	Asp	Pro	Pro	Ser	Met	305	310	315	320
Ala	Cys	Thr	Arg	Pro	Pro	Ser	Ser	Pro	Arg	Asn	Val	Ile	Ser	Asn	Ile	325	330	335	
Asn	Glu	Thr	Ser	Val	Ile	Leu	Asp	Trp	Ser	Trp	Pro	Leu	Asp	Thr	Gly	340	345	350	
Gly	Arg	Lys	Asp	Val	Thr	Phe	Asn	Ile	Ile	Cys	Lys	Lys	Cys	Gly	Trp	355	360	365	
Asn	Ile	Lys	Gln	Cys	Glu	Pro	Cys	Ser	Pro	Asn	Val	Arg	Phe	Leu	Pro	370	375	380	
Arg	Gln	Phe	Gly	Leu	Thr	Asn	Thr	Thr	Val	Thr	Val	Thr	Asp	Leu	Leu	385	390	395	400

Ala	His	Thr	Asn	Tyr	Thr	Phe	Glu	Ile	Asp	Ala	Val	Asn	Gly	Val	Ser	405	410	415	
Glu	Leu	Ser	Ser	Pro	Pro	Arg	Gln	Phe	Ala	Ala	Val	Ser	Ile	Thr	Thr	420	425	430	
Asn	Gln	Ala	Ala	Pro	Ser	Pro	Val	Leu	Thr	Ile	Lys	Lys	Asp	Arg	Thr	435	440	445	
Ser	Arg	Asn	Ser	Ile	Ser	Leu	Ser	Trp	Gln	Glu	Pro	Glu	His	Pro	Asn	450	455	460	
Gly	Ile	Ile	Leu	Asp	Tyr	Glu	Val	Lys	Tyr	Tyr	Glu	Lys	Gln	Glu	Gln	465	470	475	480
Glu	Thr	Ser	Tyr	Thr	Ile	Leu	Arg	Ala	Arg	Gly	Thr	Asn	Val	Thr	Ile	485	490	495	
Ser	Ser	Leu	Lys	Pro	Asp	Thr	Ile	Tyr	Val	Phe	Gln	Ile	Arg	Ala	Arg	500	505	510	
Thr	Ala	Ala	Gly	Tyr	Gly	Thr	Asn	Ser	Arg	Lys	Phe	Glu	Phe	Glu	Thr	515	520	525	
Ser	Pro	Asp	Ser	Phe	Ser	Ile	Ser	Gly	Glu	Ser	Ser	Gln	Val	Val	Met	530	535	540	
Ile	Ala	Ile	Ser	Ala	Ala	Val	Ala	Ile	Ile	Leu	Leu	Thr	Val	Val	Ile	545	550	555	560
Tyr	Val	Leu	Ile	Gly	Arg	Phe	Cys	Gly	Tyr	Lys	Ser	Lys	His	Gly	Ala	565	570	575	
Asp	Glu	Lys	Arg	Leu	His	Phe	Gly	Asn	Gly	His	Leu	Lys	Leu	Pro	Gly	580	585	590	
Leu	Arg	Thr	Tyr	Val	Asp	Pro	His	Thr	Tyr	Glu	Asp	Pro	Thr	Gln	Ala	595	600	605	
Val	His	Glu	Phe	Ala	Lys	Glu	Leu	Asp	Ala	Thr	Asn	Ile	Ser	Ile	Asp	610	615	620	
Lys	Val	Val	Gly	Ala	Gly	Glu	Phe	Gly	Glu	Val	Cys	Ser	Gly	Arg	Leu	625	630	635	640
Lys	Leu	Pro	Ser	Lys	Lys	Glu	Ile	Ser	Val	Ala	Ile	Lys	Thr	Leu	Lys	645	650	655	
Val	Gly	Tyr	Thr	Glu	Lys	Gln	Arg	Arg	Asp	Phe	Leu	Gly	Glu	Ala	Ser	660	665	670	
Ile	Met	Gly	Gln	Phe	Asp	His	Pro	Asn	Ile	Ile	Arg	Leu	Glu	Gly	Val	675	680	685	
Val	Thr	Lys	Ser	Lys	Pro	Val	Met	Ile	Val	Thr	Glu	Tyr	Met	Glu	Asn	690	695	700	

Gly Ser Leu Asp Ser Phe Leu Arg Lys His Asp Ala Gln Phe Thr Val
 705 710 715 720
 Ile Gln Leu Val Gly Met Leu Arg Gly Ile Ala Ser Gly Met Lys Tyr
 725 730 735
 Leu Ser Asp Met Gly Tyr Val His Arg Asp Leu Ala Ala Arg Asn Ile
 740 745 750
 Leu Ile Asn Ser Asn Leu Val Cys Lys Val Ser Asp Phe Gly Leu Ser
 755 760 765
 Arg Val Leu Glu Asp Asp Pro Glu Ala Ala Tyr Thr Thr Arg Gly Gly
 770 775 780
 Lys Ile Pro Ile Arg Trp Thr Ser Pro Glu Ala Ile Ala Tyr Arg Lys
 785 790 795 800
 Phe Thr Ser Ala Ser Asp Val Trp Ser Tyr Gly Ile Val Leu Trp Glu
 805 810 815
 Val Met Ser Tyr Gly Glu Arg Pro Tyr Trp Glu Met Ser Asn Gln Asp
 820 825 830
 Val Ile Lys Ala Val Asp Glu Gly Tyr Arg Leu Pro Pro Pro Met Asp
 835 840 845
 Cys Pro Ala Ala Leu Tyr Gln Leu Met Leu Asp Cys Trp Gln Lys Asp
 850 855 860
 Arg Asn Asn Arg Pro Lys Phe Glu Gln Ile Val Ser Ile Leu Asp Lys
 865 870 875 880
 Leu Ile Arg Asn Pro Gly Ser Leu Lys Ile Ile Thr Ser Ala Ala Ala
 885 890 895
 Arg Pro Ser Asn Leu Leu Leu Asp Gln Ser Asn Val Asp Ile Ser Thr
 900 905 910
 Phe Arg Thr Thr Gly Asp Trp Leu Asn Gly Val Arg Thr Ala His Cys
 915 920 925
 Lys Glu Ile Phe Thr Gly Val Glu Tyr Ser Ser Cys Asp Thr Ile Ala
 930 935 940
 Lys Ile Ser Thr Asp Asp Met Lys Lys Val Gly Val Thr Val Val Gly
 945 950 955 960
 Pro Gln Lys Lys Ile Ile Ser Ser Ile Lys Ala Leu Glu Thr Gln Ser
 965 970 975
 Lys Asn Gly Pro Val Pro Val
 980

<210> 228

<211> 496

<212> PRT

<213> Homo sapiens

<400> 228

Met	Ser	Gly	Glu	Val	Arg	Leu	Arg	Gln	Leu	Glu	Gln	Phe	Ile	Leu	Asp
1				5					10					15	
Gly	Pro	Ala	Gln	Thr	Asn	Gly	Gln	Tyr	Phe	Ser	Val	Glu	Thr	Leu	Leu
			20					25					30		
Asp	Ile	Leu	Ile	Cys	Leu	Tyr	Asp	Glu	Cys	Asn	Asn	Ser	Pro	Leu	Arg
		35					40					45			
Arg	Glu	Lys	Asn	Ile	Leu	Glu	Tyr	Leu	Glu	Trp	Ala	Lys	Pro	Phe	Thr
	50					55					60				
Ser	Lys	Val	Lys	Gln	Met	Arg	Leu	His	Arg	Glu	Asp	Phe	Glu	Ile	Leu
65					70				75					80	
Lys	Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Glu	Val	Ala	Val	Val	Lys	Leu
				85					90					95	
Lys	Asn	Ala	Asp	Lys	Val	Phe	Ala	Met	Lys	Ile	Leu	Asn	Lys	Trp	Glu
			100					105						110	
Met	Leu	Lys	Arg	Ala	Glu	Thr	Ala	Cys	Phe	Arg	Glu	Glu	Arg	Asp	Val
		115					120						125		
Leu	Val	Asn	Gly	Asp	Asn	Lys	Trp	Ile	Thr	Thr	Leu	His	Tyr	Ala	Phe
	130					135					140				
Gln	Asp	Asp	Asn	Asn	Leu	Tyr	Leu	Val	Met	Asp	Tyr	Tyr	Val	Gly	Gly
145					150					155					160
Asp	Leu	Leu	Thr	Leu	Leu	Ser	Lys	Phe	Glu	Asp	Arg	Leu	Pro	Glu	Asp
				165					170					175	
Met	Ala	Arg	Phe	Tyr	Leu	Ala	Glu	Met	Val	Ile	Ala	Ile	Asp	Ser	Val
			180					185					190		
His	Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Ile	Leu
		195					200					205			
Met	Asp	Met	Asn	Gly	His	Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu
	210					215					220				
Lys	Leu	Met	Glu	Asp	Gly	Thr	Val	Gln	Ser	Ser	Val	Ala	Val	Gly	Thr
225					230					235					240
Pro	Asp	Tyr	Ile	Ser	Pro	Glu	Ile	Leu	Gln	Ala	Met	Glu	Asp	Gly	Lys
				245					250					255	
Gly	Arg	Tyr	Gly	Pro	Glu	Cys	Asp	Trp	Trp	Ser	Leu	Gly	Val	Cys	Met
			260					265					270		
Tyr	Glu	Met	Leu	Tyr	Gly	Glu	Thr	Pro	Phe	Tyr	Ala	Glu	Ser	Leu	Val

275	280	285
Glu Thr Tyr Gly Lys Ile Met Asn His Lys Glu Arg Phe Gln Phe Pro		
290	295	300
Ala Gln Val Thr Asp Val Ser Glu Asn Ala Lys Asp Leu Ile Arg Arg		
305	310	315
Leu Ile Cys Ser Arg Glu His Arg Leu Gly Gln Asn Gly Ile Glu Asp		
	325	330
Phe Lys Lys His Pro Phe Phe Ser Gly Ile Asp Trp Asp Asn Ile Arg		
	340	345
Asn Cys Glu Ala Pro Tyr Ile Pro Glu Val Ser Ser Pro Thr Asp Thr		
	355	360
Ser Asn Phe Asp Val Asp Asp Asp Cys Leu Lys Asn Ser Glu Thr Met		
	370	375
Pro Pro Pro Thr His Thr Ala Phe Ser Gly His His Leu Pro Phe Val		
385	390	395
Gly Phe Thr Tyr Thr Ser Ser Cys Val Leu Ser Asp Arg Ser Cys Leu		
	405	410
Arg Val Thr Ala Gly Pro Thr Ser Leu Asp Leu Asp Val Asn Val Gln		
	420	425
Arg Thr Leu Asp Asn Asn Leu Ala Thr Glu Ala Tyr Glu Arg Arg Ile		
	435	440
Lys Arg Leu Glu Gln Glu Lys Leu Glu Leu Ser Arg Lys Leu Gln Glu		
	450	455
Ser Thr Gln Thr Val Gln Ala Leu Gln Tyr Ser Thr Val Asp Gly Pro		
465	470	475
Leu Thr Ala Ser Lys Asp Leu Glu Ile Lys Asn Leu Lys Glu Glu Ile		
	485	490
<p><210> 229</p> <p><211> 433</p> <p><212> PRT</p> <p><213> Homo sapiens</p> <p><400> 229</p>		
Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu		
1	5	10
Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr		
	20	25
Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys		
	35	40
		45

Tyr	Leu	Met	Gly	Asp	Leu	Leu	Gly	Glu	Gly	Ser	Tyr	Gly	Lys	Val	Lys
50						55					60				
Glu	Val	Leu	Asp	Ser	Glu	Thr	Leu	Cys	Arg	Arg	Ala	Val	Lys	Ile	Leu
65					70				75						80
Lys	Lys	Lys	Lys	Leu	Arg	Arg	Ile	Pro	Asn	Gly	Glu	Ala	Asn	Val	Lys
				85					90					95	
Lys	Glu	Ile	Gln	Leu	Leu	Arg	Arg	Leu	Arg	His	Lys	Asn	Val	Ile	Gln
			100					105					110		
Leu	Val	Asp	Val	Leu	Tyr	Asn	Glu	Glu	Lys	Gln	Lys	Met	Tyr	Met	Val
		115					120					125			
Met	Glu	Tyr	Cys	Val	Cys	Gly	Met	Gln	Glu	Met	Leu	Asp	Ser	Val	Pro
130						135					140				
Glu	Lys	Arg	Phe	Pro	Val	Cys	Gln	Ala	His	Gly	Tyr	Phe	Cys	Gln	Leu
145					150					155					160
Ile	Asp	Gly	Leu	Glu	Tyr	Leu	His	Ser	Gln	Gly	Ile	Val	His	Lys	Asp
			165						170					175	
Ile	Lys	Pro	Gly	Asn	Leu	Leu	Leu	Thr	Thr	Gly	Gly	Thr	Leu	Lys	Ile
			180					185					190		
Ser	Asp	Leu	Gly	Val	Ala	Glu	Ala	Leu	His	Pro	Phe	Ala	Ala	Asp	Asp
	195						200					205			
Thr	Cys	Arg	Thr	Ser	Gln	Gly	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Glu	Ile
210						215					220				
Ala	Asn	Gly	Leu	Asp	Thr	Phe	Ser	Gly	Phe	Lys	Val	Asp	Ile	Trp	Ser
225					230					235					240
Ala	Gly	Val	Thr	Leu	Tyr	Asn	Ile	Thr	Thr	Gly	Leu	Tyr	Pro	Phe	Glu
			245						250					255	
Gly	Asp	Asn	Ile	Tyr	Lys	Leu	Phe	Glu	Asn	Ile	Gly	Lys	Gly	Ser	Tyr
			260					265					270		
Ala	Ile	Pro	Gly	Asp	Cys	Gly	Pro	Pro	Leu	Ser	Asp	Leu	Leu	Lys	Gly
		275					280					285			
Met	Leu	Glu	Tyr	Glu	Pro	Ala	Lys	Arg	Phe	Ser	Ile	Arg	Gln	Ile	Arg
290						295					300				
Gln	His	Ser	Trp	Phe	Arg	Lys	Lys	His	Pro	Pro	Ala	Glu	Ala	Pro	Val
305					310					315					320
Pro	Ile	Pro	Pro	Ser	Pro	Asp	Thr	Lys	Asp	Arg	Trp	Arg	Ser	Met	Thr
				325					330					335	
Val	Val	Pro	Tyr	Leu	Glu	Asp	Leu	His	Gly	Ala	Asp	Glu	Asp	Glu	Asp
			340				345					350			

Leu Phe Asp Ile Glu Asp Asp Ile Ile Tyr Thr Gln Asp Phe Thr Val
355 360 365

Pro Gly Gln Val Pro Glu Glu Glu Ala Ser His Asn Gly Gln Arg Arg
370 375 380

Gly Leu Pro Lys Ala Val Cys Met Asn Gly Thr Glu Ala Ala Gln Leu
385 390 395 400

Ser Thr Lys Ser Arg Ala Glu Gly Arg Ala Pro Asn Pro Ala Arg Lys
405 410 415

Ala Cys Ser Ala Ser Ser Lys Ile Arg Arg Leu Ser Ala Cys Lys Gln
420 425 430

Gln

<210> 230
<211> 433
<212> PRT
<213> Homo sapiens

<400> 230

Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu
1 5 10 15

Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr
20 25 30

Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys
35 40 45

Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys
50 55 60

Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu
65 70 75 80

Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys
85 90 95

Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln
100 105 110

Leu Val Asp Val Leu Tyr Asn Glu Glu Lys Gln Lys Met Tyr Met Val
115 120 125

Met Glu Tyr Cys Val Cys Gly Met Gln Glu Met Leu Asp Ser Val Pro
130 135 140

Glu Lys Arg Phe Pro Val Cys Gln Ala His Gly Tyr Phe Cys Gln Leu
145 150 155 160

Ile Asp Gly Leu Glu Tyr Leu His Ser Gln Gly Ile Val His Lys Asp
165 170 175

Ile Lys Pro Gly Asn Leu Leu Leu Thr Thr Gly Gly Thr Leu Lys Ile
180 185 190

Ser Asp Leu Gly Val Ala Glu Ala Leu His Pro Phe Ala Ala Asp Asp
195 200 205

Thr Cys Arg Thr Ser Gln Gly Ser Pro Ala Phe Gln Pro Pro Glu Ile
210 215 220

Ala Asn Gly Leu Asp Thr Phe Ser Gly Phe Lys Val Asp Ile Trp Ser
225 230 235 240

Ala Gly Val Thr Leu Tyr Asn Ile Thr Thr Gly Leu Tyr Pro Phe Glu
245 250 255

Gly Asp Asn Ile Tyr Lys Leu Phe Glu Asn Ile Gly Lys Gly Ser Tyr
260 265 270

Ala Ile Pro Gly Asp Cys Gly Pro Pro Leu Ser Asp Leu Leu Lys Gly
275 280 285

Met Leu Glu Tyr Glu Pro Ala Lys Arg Phe Ser Ile Arg Gln Ile Arg
290 295 300

Gln His Ser Trp Phe Arg Lys Lys His Pro Pro Ala Glu Ala Pro Val
305 310 315 320

Pro Ile Pro Pro Ser Pro Asp Thr Lys Asp Arg Trp Arg Ser Met Thr
325 330 335

Val Val Pro Tyr Leu Glu Asp Leu His Gly Ala Asp Glu Asp Glu Asp
340 345 350

Leu Phe Asp Ile Glu Asp Asp Ile Ile Tyr Thr Gln Asp Phe Thr Val
355 360 365

Pro Gly Gln Val Pro Glu Glu Glu Ala Ser His Asn Gly Gln Arg Arg
370 375 380

Gly Leu Pro Lys Ala Val Cys Met Asn Gly Thr Glu Ala Ala Gln Leu
385 390 395 400

Ser Thr Lys Ser Arg Ala Glu Gly Arg Ala Pro Asn Pro Ala Arg Lys
405 410 415

Ala Cys Ser Ala Ser Ser Lys Ile Arg Arg Leu Ser Ala Cys Lys Gln
420 425 430

Gln

<210> 231

<211> 518

<212> PRT

<213> Homo sapiens

<400> 231

Met	Ser	Cys	Val	Lys	Leu	Trp	Pro	Ser	Gly	Ala	Pro	Ala	Pro	Leu	Val
1				5					10					15	
Ser	Ile	Glu	Glu	Leu	Glu	Asn	Gln	Glu	Leu	Val	Gly	Lys	Asp	Gly	Phe
		20						25					30		
Gly	Thr	Val	Phe	Arg	Ala	Gln	His	Arg	Lys	Trp	Gly	Tyr	Asp	Val	Ala
	35						40					45			
Val	Lys	Ile	Val	Asn	Ser	Lys	Ala	Ile	Ser	Arg	Glu	Val	Lys	Ala	Met
	50					55					60				
Ala	Ser	Leu	Asp	Asn	Glu	Phe	Val	Leu	Arg	Leu	Glu	Gly	Val	Ile	Glu
65				70					75						80
Lys	Val	Asn	Trp	Asp	Gln	Asp	Pro	Lys	Pro	Ala	Leu	Val	Thr	Lys	Phe
				85					90					95	
Met	Glu	Asn	Gly	Ser	Leu	Ser	Gly	Leu	Leu	Gln	Ser	Gln	Cys	Pro	Arg
		100						105					110		
Pro	Trp	Pro	Leu	Leu	Cys	Arg	Leu	Leu	Lys	Glu	Val	Val	Leu	Gly	Met
		115					120						125		
Phe	Tyr	Leu	His	Asp	Gln	Asn	Pro	Val	Leu	Leu	His	Arg	Asp	Leu	Lys
	130					135					140				
Pro	Ser	Asn	Val	Leu	Pro	Asp	Pro	Glu	Leu	His	Val	Lys	Leu	Ala	Asp
145				150					155						160
Phe	Gly	Leu	Ser	Thr	Phe	Gln	Gly	Gly	Ser	Gln	Ser	Gly	Thr	Gly	Ser
				165					170					175	
Gly	Glu	Pro	Gly	Gly	Thr	Leu	Gly	Tyr	Leu	Ala	Pro	Glu	Leu	Phe	Val
		180						185					190		
Asn	Val	Asn	Arg	Lys	Ala	Ser	Thr	Ala	Ser	Asp	Val	Tyr	Ser	Phe	Gly
	195						200					205			
Ile	Leu	Met	Trp	Ala	Val	Leu	Ala	Gly	Arg	Glu	Val	Glu	Leu	Pro	Thr
	210					215					220				
Glu	Pro	Ser	Leu	Val	Tyr	Glu	Ala	Val	Cys	Asn	Arg	Gln	Asn	Arg	Pro
225					230					235					240
Ser	Leu	Ala	Glu	Leu	Pro	Gln	Ala	Gly	Pro	Glu	Thr	Pro	Gly	Leu	Glu
				245					250					255	
Gly	Leu	Lys	Glu	Leu	Met	Gln	Leu	Cys	Trp	Ser	Ser	Glu	Pro	Lys	Asp
			260					265					270		
Arg	Pro	Ser	Phe	Gln	Glu	Cys	Leu	Pro	Lys	Thr	Asp	Glu	Val	Phe	Gln
	275						280					285			
Met	Val	Glu	Asn	Asn	Met	Asn	Ala	Ala	Val	Ser	Thr	Val	Lys	Asp	Phe

290	295	300
Leu Ser Gln Leu Lys Ser Ser Asn Arg Arg Phe Ser Ile Pro Glu Ser 305 310 315 320		
Gly Gln Gly Gly Thr Glu Met Asp Gly Phe Arg Arg Thr Ile Glu Asn 325 330 335		
Gln His Ser Arg Asn Asp Val Met Val Ser Glu Trp Leu Asn Lys Leu 340 345 350		
Asn Leu Glu Glu Pro Pro Ser Ser Val Pro Lys Lys Cys Pro Ser Leu 355 360 365		
Thr Lys Arg Ser Arg Ala Gln Glu Glu Gln Val Pro Gln Ala Trp Thr 370 375 380		
Ala Gly Thr Ser Ser Asp Ser Met Ala Gln Pro Pro Gln Thr Pro Glu 385 390 395 400		
Thr Ser Thr Phe Arg Asn Gln Met Pro Ser Pro Thr Ser Thr Gly Thr 405 410 415		
Pro Ser Pro Gly Pro Arg Gly Asn Gln Gly Ala Glu Arg Gln Gly Met 420 425 430		
Asn Trp Ser Cys Arg Thr Pro Glu Pro Asn Pro Val Thr Gly Arg Pro 435 440 445		
Leu Val Asn Ile Tyr Asn Cys Ser Gly Val Gln Val Gly Asp Asn Asn 450 455 460		
Tyr Leu Thr Met Gln Gln Thr Thr Ala Leu Pro Thr Trp Gly Leu Ala 465 470 475 480		
Pro Ser Gly Lys Gly Arg Gly Leu Gln His Pro Pro Pro Val Gly Ser 485 490 495		
Gln Glu Gly Pro Lys Asp Pro Glu Ala Trp Ser Arg Pro Gln Gly Trp 500 505 510		
Tyr Asn His Ser Gly Lys 515		

<210> 232

<211> 756

<212> PRT

<213> Homo sapiens

<400> 232

Met Ser Trp Ser Pro Ser Leu Thr Thr Gln Thr Cys Gly Ala Trp Glu 1 5 10 15
Met Lys Glu Arg Leu Gly Thr Gly Gly Phe Gly Asn Val Ile Arg Trp 20 25 30

His	Asn	Gln	Glu	Thr	Gly	Glu	Gln	Ile	Ala	Ile	Lys	Gln	Cys	Arg	Gln
35						40						45			
Glu	Leu	Ser	Pro	Arg	Asn	Arg	Glu	Arg	Trp	Cys	Leu	Glu	Ile	Gln	Ile
50						55				60					
Met	Arg	Arg	Leu	Thr	His	Pro	Asn	Val	Val	Ala	Ala	Arg	Asp	Val	Pro
65				70						75				80	
Glu	Gly	Met	Gln	Asn	Leu	Ala	Pro	Asn	Asp	Leu	Pro	Leu	Leu	Ala	Met
				85				90						95	
Glu	Tyr	Cys	Gln	Gly	Gly	Asp	Leu	Arg	Lys	Tyr	Leu	Asn	Gln	Phe	Glu
		100						105				110			
Asn	Cys	Cys	Gly	Leu	Arg	Glu	Gly	Ala	Ile	Leu	Thr	Leu	Leu	Ser	Asp
		115				120						125			
Ile	Ala	Ser	Ala	Leu	Arg	Tyr	Leu	His	Glu	Asn	Arg	Ile	Ile	His	Arg
130						135				140					
Asp	Leu	Lys	Pro	Glu	Asn	Ile	Val	Leu	Gln	Gln	Gly	Glu	Gln	Arg	Leu
145				150						155				160	
Ile	His	Lys	Ile	Ile	Asp	Leu	Gly	Tyr	Ala	Lys	Glu	Leu	Asp	Gln	Gly
				165				170						175	
Ser	Leu	Cys	Thr	Ser	Phe	Val	Gly	Thr	Leu	Gln	Tyr	Leu	Ala	Pro	Glu
		180						185				190			
Leu	Leu	Glu	Gln	Gln	Lys	Tyr	Thr	Val	Thr	Val	Asp	Tyr	Trp	Ser	Phe
		195				200						205			
Gly	Thr	Leu	Ala	Phe	Glu	Cys	Ile	Thr	Gly	Phe	Arg	Pro	Phe	Leu	Pro
210						215				220					
Asn	Trp	Gln	Pro	Val	Gln	Trp	His	Ser	Lys	Val	Arg	Gln	Lys	Ser	Glu
225				230						235				240	
Val	Asp	Ile	Val	Val	Ser	Glu	Asp	Leu	Asn	Gly	Thr	Val	Lys	Phe	Ser
				245				250						255	
Ser	Ser	Leu	Pro	Tyr	Pro	Asn	Asn	Leu	Asn	Ser	Val	Leu	Ala	Glu	Arg
		260						265				270			
Leu	Glu	Lys	Trp	Leu	Gln	Leu	Met	Leu	Met	Trp	His	Pro	Arg	Gln	Arg
		275				280						285			
Gly	Thr	Asp	Pro	Thr	Tyr	Gly	Pro	Asn	Gly	Cys	Phe	Lys	Ala	Leu	Asp
290						295				300					
Asp	Ile	Leu	Asn	Leu	Lys	Leu	Val	His	Ile	Leu	Asn	Met	Val	Thr	Gly
305				310						315				320	
Thr	Ile	His	Thr	Tyr	Pro	Val	Thr	Glu	Asp	Glu	Ser	Leu	Gln	Ser	Leu
				325				330						335	

Lys Ala Arg Ile Gln Gln Asp Thr Gly Ile Pro Glu Glu Asp Gln Glu
 340 345 350
 Leu Leu Gln Glu Ala Gly Leu Ala Leu Ile Pro Asp Lys Pro Ala Thr
 355 360 365
 Gln Cys Ile Ser Asp Gly Lys Leu Asn Glu Gly His Thr Leu Asp Met
 370 375 380
 Asp Leu Val Phe Leu Phe Asp Asn Ser Lys Ile Thr Tyr Glu Thr Gln
 385 390 395 400
 Ile Ser Pro Arg Pro Gln Pro Glu Ser Val Ser Cys Ile Leu Gln Glu
 405 410 415
 Pro Lys Arg Asn Leu Ala Phe Phe Gln Leu Arg Lys Val Trp Gly Gln
 420 425 430
 Val Trp His Ser Ile Gln Thr Leu Lys Glu Asp Cys Asn Arg Leu Gln
 435 440 445
 Gln Gly Gln Arg Ala Ala Met Met Asn Leu Leu Arg Asn Asn Ser Cys
 450 455 460
 Leu Ser Lys Met Lys Asn Ser Met Ala Ser Met Ser Gln Gln Leu Lys
 465 470 475 480
 Ala Lys Leu Asp Phe Phe Lys Thr Ser Ile Gln Ile Asp Leu Glu Lys
 485 490 495
 Tyr Ser Glu Gln Thr Glu Phe Gly Ile Thr Ser Asp Lys Leu Leu Leu
 500 505 510
 Ala Trp Arg Glu Met Glu Gln Ala Val Glu Leu Cys Gly Arg Glu Asn
 515 520 525
 Glu Val Lys Leu Leu Val Glu Arg Met Met Ala Leu Gln Thr Asp Ile
 530 535 540
 Val Asp Leu Gln Arg Ser Pro Met Gly Arg Lys Gln Gly Gly Thr Leu
 545 550 555 560
 Asp Asp Leu Glu Glu Gln Ala Arg Glu Leu Tyr Arg Arg Leu Arg Glu
 565 570 575
 Lys Pro Arg Asp Gln Arg Thr Glu Gly Asp Ser Gln Glu Met Val Arg
 580 585 590
 Leu Leu Leu Gln Ala Ile Gln Ser Phe Glu Lys Lys Val Arg Val Ile
 595 600 605
 Tyr Thr Gln Leu Ser Lys Thr Val Val Cys Lys Gln Lys Ala Leu Glu
 610 615 620
 Leu Leu Pro Lys Val Glu Glu Val Val Ser Leu Met Asn Glu Asp Glu
 625 630 635 640

Lys Thr Val Val Arg Leu Gln Glu Lys Arg Gln Lys Glu Leu Trp Asn
645 650 655

Leu Leu Lys Ile Ala Cys Ser Lys Val Arg Gly Pro Val Ser Gly Ser
660 665 670

Pro Asp Ser Met Asn Ala Ser Arg Leu Ser Gln Pro Gly Gln Leu Met
675 680 685

Ser Gln Pro Ser Thr Ala Ser Asn Ser Leu Pro Glu Pro Ala Lys Lys
690 695 700

Ser Glu Glu Leu Val Ala Glu Ala His Asn Leu Cys Thr Leu Leu Glu
705 710 715 720

Asn Ala Ile Gln Asp Thr Val Arg Glu Gln Asp Gln Ser Phe Thr Ala
725 730 735

Leu Asp Trp Ser Trp Leu Gln Thr Glu Glu Glu Glu His Ser Cys Leu
740 745 750

Glu Gln Ala Ser
755

<210> 233
<211> 647
<212> PRT
<213> Homo sapiens

<400> 233

Met Arg Leu Thr Leu Leu Cys Cys Thr Trp Arg Glu Glu Arg Met Gly
1 5 10 15

Glu Glu Gly Ser Glu Leu Pro Val Cys Ala Ser Cys Gly Gln Arg Ile
20 25 30

Tyr Asp Gly Gln Tyr Leu Gln Ala Leu Asn Ala Asp Trp His Ala Asp
35 40 45

Cys Phe Arg Cys Cys Asp Cys Ser Ala Ser Leu Ser His Gln Tyr Tyr
50 55 60

Glu Lys Asp Gly Gln Leu Phe Cys Lys Lys Asp Tyr Trp Ala Arg Tyr
65 70 75 80

Gly Glu Ser Cys His Gly Cys Ser Glu Gln Ile Thr Lys Gly Leu Val
85 90 95

Met Val Ala Gly Glu Leu Lys Tyr His Pro Glu Cys Phe Ile Cys Leu
100 105 110

Thr Cys Gly Thr Phe Ile Gly Asp Gly Asp Thr Tyr Thr Leu Val Glu
115 120 125

His Ser Lys Leu Tyr Cys Gly His Cys Tyr Tyr Gln Thr Val Val Thr
130 135 140

Pro	Val	Ile	Glu	Gln	Ile	Leu	Pro	Asp	Ser	Pro	Gly	Ser	His	Leu	Pro	145	150	155	160
His	Thr	Val	Thr	Leu	Val	Ser	Ile	Pro	Ala	Ser	Ser	His	Gly	Lys	Arg	165	170	175	
Gly	Leu	Ser	Val	Ser	Ile	Asp	Pro	Pro	His	Gly	Pro	Pro	Gly	Cys	Gly	180	185	190	
Thr	Glu	His	Ser	His	Thr	Val	Arg	Val	Gln	Gly	Val	Asp	Pro	Gly	Cys	195	200	205	
Met	Ser	Pro	Asp	Val	Lys	Asn	Ser	Ile	His	Val	Gly	Asp	Arg	Ile	Leu	210	215	220	
Glu	Ile	Asn	Gly	Thr	Pro	Ile	Arg	Asn	Val	Pro	Leu	Asp	Glu	Ile	Asp	225	230	235	240
Leu	Leu	Ile	Gln	Glu	Thr	Ser	Arg	Leu	Leu	Gln	Leu	Thr	Leu	Glu	His	245	250	255	
Asp	Pro	His	Asp	Thr	Leu	Gly	His	Gly	Leu	Gly	Pro	Glu	Thr	Ser	Pro	260	265	270	
Leu	Ser	Ser	Pro	Ala	Tyr	Thr	Pro	Ser	Gly	Glu	Ala	Gly	Ser	Ser	Ala	275	280	285	
Arg	Gln	Lys	Pro	Val	Leu	Arg	Ser	Cys	Ser	Ile	Asp	Arg	Ser	Pro	Gly	290	295	300	
Ala	Gly	Ser	Leu	Gly	Ser	Pro	Ala	Ser	Gln	Arg	Lys	Asp	Leu	Gly	Arg	305	310	315	320
Ser	Glu	Ser	Leu	Arg	Val	Val	Cys	Arg	Pro	His	Arg	Ile	Phe	Arg	Pro	325	330	335	
Ser	Asp	Leu	Ile	His	Gly	Glu	Val	Leu	Gly	Lys	Gly	Cys	Phe	Gly	Gln	340	345	350	
Ala	Ile	Lys	Val	Thr	His	Arg	Glu	Thr	Gly	Glu	Val	Met	Val	Met	Lys	355	360	365	
Glu	Leu	Ile	Arg	Phe	Asp	Glu	Glu	Thr	Gln	Arg	Thr	Phe	Leu	Lys	Glu	370	375	380	
Val	Lys	Val	Met	Arg	Cys	Leu	Glu	His	Pro	Asn	Val	Leu	Lys	Phe	Ile	385	390	395	400
Gly	Val	Leu	Tyr	Lys	Asp	Lys	Arg	Leu	Asn	Phe	Ile	Thr	Glu	Tyr	Ile	405	410	415	
Lys	Gly	Gly	Thr	Leu	Arg	Gly	Ile	Ile	Lys	Ser	Met	Asp	Ser	Gln	Tyr	420	425	430	
Pro	Trp	Ser	Gln	Arg	Val	Ser	Phe	Ala	Lys	Asp	Ile	Ala	Ser	Gly	Met	435	440	445	

Ala Tyr Leu His Ser Met Asn Ile Ile His Arg Asp Leu Asn Ser His
450 455 460

Asn Cys Leu Val Arg Glu Asn Lys Asn Val Val Val Ala Asp Phe Gly
465 470 475 480

Leu Ala Arg Leu Met Val Asp Glu Lys Thr Gln Pro Glu Gly Leu Arg
485 490 495

Ser Leu Lys Lys Pro Asp Arg Lys Lys Arg Tyr Thr Val Val Gly Asn
500 505 510

Pro Tyr Trp Met Ala Pro Glu Met Ile Asn Gly Arg Ser Tyr Asp Glu
515 520 525

Lys Val Asp Val Phe Ser Phe Gly Ile Val Leu Cys Glu Ile Ile Gly
530 535 540

Arg Val Asn Ala Asp Pro Asp Tyr Leu Pro Arg Thr Met Asp Phe Gly
545 550 555 560

Leu Asn Val Arg Gly Phe Leu Asp Arg Tyr Cys Pro Pro Asn Cys Pro
565 570 575

Pro Ser Phe Phe Pro Ile Thr Val Arg Cys Cys Asp Leu Asp Pro Glu
580 585 590

Lys Arg Pro Ser Phe Val Lys Leu Glu His Trp Leu Glu Thr Leu Arg
595 600 605

Met His Leu Ala Gly His Leu Pro Leu Gly Pro Gln Leu Glu Gln Leu
610 615 620

Asp Arg Gly Phe Trp Glu Thr Tyr Arg Arg Gly Glu Ser Gly Leu Pro
625 630 635 640

Ala His Pro Glu Val Pro Asp
645

<210> 234
<211> 647
<212> PRT
<213> Homo sapiens

<400> 234

Met Arg Leu Thr Leu Leu Cys Cys Thr Trp Arg Glu Glu Arg Met Gly
1 5 10 15

Glu Glu Gly Ser Glu Leu Pro Val Cys Ala Ser Cys Gly Gln Arg Ile
20 25 30

Tyr Asp Gly Gln Tyr Leu Gln Ala Leu Asn Ala Asp Trp His Ala Asp
35 40 45

Cys Phe Arg Cys Cys Asp Cys Ser Ala Ser Leu Ser His Gln Tyr Tyr

50					55					60					
Glu	Lys	Asp	Gly	Gln	Leu	Phe	Cys	Lys	Lys	Asp	Tyr	Trp	Ala	Arg	Tyr
65					70					75					80
Gly	Glu	Ser	Cys	His	Gly	Cys	Ser	Glu	Gln	Ile	Thr	Lys	Gly	Leu	Val
				85					90					95	
Met	Val	Ala	Gly	Glu	Leu	Lys	Tyr	His	Pro	Glu	Cys	Phe	Ile	Cys	Leu
			100					105					110		
Thr	Cys	Gly	Thr	Phe	Ile	Gly	Asp	Gly	Asp	Thr	Tyr	Thr	Leu	Val	Glu
		115					120					125			
His	Ser	Lys	Leu	Tyr	Cys	Gly	His	Cys	Tyr	Tyr	Gln	Thr	Val	Val	Thr
		130				135					140				
Pro	Val	Ile	Glu	Gln	Ile	Leu	Pro	Asp	Ser	Pro	Gly	Ser	His	Leu	Pro
145					150					155					160
His	Thr	Val	Thr	Leu	Val	Ser	Ile	Pro	Ala	Ser	Ser	His	Gly	Lys	Arg
				165					170					175	
Gly	Leu	Ser	Val	Ser	Ile	Asp	Pro	Pro	His	Gly	Pro	Pro	Gly	Cys	Gly
			180					185						190	
Thr	Glu	His	Ser	His	Thr	Val	Arg	Val	Gln	Gly	Val	Asp	Pro	Gly	Cys
		195					200					205			
Met	Ser	Pro	Asp	Val	Lys	Asn	Ser	Ile	His	Val	Gly	Asp	Arg	Ile	Leu
		210				215					220				
Glu	Ile	Asn	Gly	Thr	Pro	Ile	Arg	Asn	Val	Pro	Leu	Asp	Glu	Ile	Asp
225					230					235					240
Leu	Leu	Ile	Gln	Glu	Thr	Ser	Arg	Leu	Leu	Gln	Leu	Thr	Leu	Glu	His
				245					250					255	
Asp	Pro	His	Asp	Thr	Leu	Gly	His	Gly	Leu	Gly	Pro	Glu	Thr	Ser	Pro
			260				265						270		
Leu	Ser	Ser	Pro	Ala	Tyr	Thr	Pro	Ser	Gly	Glu	Ala	Gly	Ser	Ser	Ala
		275					280					285			
Arg	Gln	Lys	Pro	Val	Leu	Arg	Ser	Cys	Ser	Ile	Asp	Arg	Ser	Pro	Gly
		290				295					300				
Ala	Gly	Ser	Leu	Gly	Ser	Pro	Ala	Ser	Gln	Arg	Lys	Asp	Leu	Gly	Arg
305					310					315					320
Ser	Glu	Ser	Leu	Arg	Val	Val	Cys	Arg	Pro	His	Arg	Ile	Phe	Arg	Pro
				325					330					335	
Ser	Asp	Leu	Ile	His	Gly	Glu	Val	Leu	Gly	Lys	Gly	Cys	Phe	Gly	Gln
			340					345					350		
Ala	Ile	Lys	Val	Thr	His	Arg	Glu	Thr	Gly	Glu	Val	Met	Val	Met	Lys

355					360					365								
Glu	Leu	Ile	Arg	Phe	Asp	Glu	Glu	Thr	Gln	Arg	Thr	Phe	Leu	Lys	Glu			
370					375					380								
Val	Lys	Val	Met	Arg	Cys	Leu	Glu	His	Pro	Asn	Val	Leu	Lys	Phe	Ile			
385					390					395					400			
Gly	Val	Leu	Tyr	Lys	Asp	Lys	Arg	Leu	Asn	Phe	Ile	Thr	Glu	Tyr	Ile			
					405					410					415			
Lys	Gly	Gly	Thr	Leu	Arg	Gly	Ile	Ile	Lys	Ser	Met	Asp	Ser	Gln	Tyr			
					420					425					430			
Pro	Trp	Ser	Gln	Arg	Val	Ser	Phe	Ala	Lys	Asp	Ile	Ala	Ser	Gly	Met			
					435					440					445			
Ala	Tyr	Leu	His	Ser	Met	Asn	Ile	Ile	His	Arg	Asp	Leu	Asn	Ser	His			
					450					455					460			
Asn	Cys	Leu	Val	Arg	Glu	Asn	Lys	Asn	Val	Val	Val	Ala	Asp	Phe	Gly			
					465					470					475		480	
Leu	Ala	Arg	Leu	Met	Val	Asp	Glu	Lys	Thr	Gln	Pro	Glu	Gly	Leu	Arg			
					485					490					495			
Ser	Leu	Lys	Lys	Pro	Asp	Arg	Lys	Lys	Arg	Tyr	Thr	Val	Val	Gly	Asn			
					500					505					510			
Pro	Tyr	Trp	Met	Ala	Pro	Glu	Met	Ile	Asn	Gly	Arg	Ser	Tyr	Asp	Glu			
					515					520					525			
Lys	Val	Asp	Val	Phe	Ser	Phe	Gly	Ile	Val	Leu	Cys	Glu	Ile	Ile	Gly			
					530					535					540			
Arg	Val	Asn	Ala	Asp	Pro	Asp	Tyr	Leu	Pro	Arg	Thr	Met	Asp	Phe	Gly			
					545					550					555		560	
Leu	Asn	Val	Arg	Gly	Phe	Leu	Asp	Arg	Tyr	Cys	Pro	Pro	Asn	Cys	Pro			
					565					570					575			
Pro	Ser	Phe	Phe	Pro	Ile	Thr	Val	Arg	Cys	Cys	Asp	Leu	Asp	Pro	Glu			
					580					585					590			
Lys	Arg	Pro	Ser	Phe	Val	Lys	Leu	Glu	His	Trp	Leu	Glu	Thr	Leu	Arg			
					595					600					605			
Met	His	Leu	Ala	Gly	His	Leu	Pro	Leu	Gly	Pro	Gln	Leu	Glu	Gln	Leu			
					610					615					620			
Asp	Arg	Gly	Phe	Trp	Glu	Thr	Tyr	Arg	Arg	Gly	Glu	Ser	Gly	Leu	Pro			
					625					630					635		640	
Ala	His	Pro	Glu	Val	Pro	Asp												
					645													

<210> 235

<211> 942
<212> PRT
<213> Homo sapiens

<400> 235

Met	Ala	Ser	Asp	Ala	Val	Gln	Ser	Glu	Pro	Arg	Ser	Trp	Ser	Leu	Leu	
1			5					10						15		
Glu	Gln	Leu	Gly	Leu	Ala	Gly	Ala	Asp	Leu	Ala	Ala	Pro	Gly	Val	Gln	
		20						25					30			
Gln	Gln	Leu	Glu	Leu	Glu	Arg	Glu	Arg	Leu	Arg	Arg	Glu	Ile	Arg	Lys	
		35					40					45				
Glu	Leu	Lys	Leu	Lys	Glu	Gly	Ala	Glu	Asn	Leu	Arg	Arg	Ala	Thr	Thr	
	50					55					60					
Asp	Leu	Gly	Arg	Ser	Leu	Gly	Pro	Val	Glu	Leu	Leu	Leu	Arg	Gly	Ser	
65				70					75						80	
Ser	Arg	Arg	Leu	Asp	Leu	Leu	His	Gln	Gln	Leu	Gln	Glu	Leu	His	Ala	
			85					90						95		
His	Val	Val	Leu	Pro	Asp	Pro	Ala	Ala	Thr	His	Asp	Gly	Pro	Gln	Ser	
			100					105					110			
Pro	Gly	Ala	Gly	Gly	Pro	Thr	Cys	Ser	Ala	Thr	Asn	Leu	Ser	Arg	Val	
	115						120					125				
Ala	Gly	Leu	Glu	Lys	Gln	Leu	Ala	Ile	Glu	Leu	Lys	Val	Lys	Gln	Gly	
	130					135					140					
Ala	Glu	Asn	Met	Ile	Gln	Thr	Tyr	Ser	Asn	Gly	Ser	Thr	Lys	Asp	Arg	
145				150					155						160	
Lys	Leu	Leu	Leu	Thr	Ala	Gln	Gln	Met	Leu	Gln	Asp	Ser	Lys	Thr	Lys	
			165					170						175		
Ile	Asp	Ile	Ile	Arg	Met	Gln	Leu	Arg	Arg	Ala	Leu	Gln	Ala	Gly	Gln	
		180					185						190			
Leu	Glu	Asn	Gln	Ala	Ala	Pro	Asp	Asp	Thr	Gln	Gly	Ser	Pro	Asp	Leu	
	195					200						205				
Gly	Ala	Val	Glu	Leu	Arg	Ile	Glu	Glu	Leu	Arg	His	His	Phe	Arg	Val	
	210					215					220					
Glu	His	Ala	Val	Ala	Glu	Gly	Ala	Lys	Asn	Val	Leu	Arg	Leu	Leu	Ser	
225				230					235						240	
Ala	Ala	Lys	Ala	Pro	Asp	Arg	Lys	Ala	Val	Ser	Glu	Ala	Gln	Glu	Lys	
			245					250						255		
Leu	Thr	Glu	Ser	Asn	Gln	Lys	Leu	Gly	Leu	Leu	Arg	Glu	Ala	Leu	Glu	
		260					265						270			

Arg	Arg	Leu	Gly	Glu	Leu	Pro	Ala	Asp	His	Pro	Lys	Gly	Arg	Leu	Leu	275	280	285
Arg	Glu	Glu	Leu	Ala	Ala	Ala	Ser	Ser	Ala	Ala	Phe	Ser	Thr	Arg	Leu	290	295	300
Ala	Gly	Pro	Phe	Pro	Ala	Thr	His	Tyr	Ser	Thr	Leu	Cys	Lys	Pro	Ala	305	310	315
Pro	Leu	Thr	Gly	Thr	Leu	Glu	Val	Arg	Val	Val	Gly	Cys	Arg	Asp	Leu	325	330	335
Pro	Glu	Thr	Ile	Pro	Trp	Asn	Pro	Thr	Pro	Ser	Met	Gly	Gly	Pro	Gly	340	345	350
Thr	Pro	Asp	Ser	Arg	Pro	Pro	Phe	Leu	Ser	Arg	Pro	Ala	Arg	Gly	Leu	355	360	365
Tyr	Ser	Arg	Ser	Gly	Ser	Leu	Ser	Gly	Arg	Ser	Ser	Leu	Lys	Ala	Glu	370	375	380
Ala	Glu	Asn	Thr	Ser	Glu	Val	Ser	Thr	Val	Leu	Lys	Leu	Asp	Asn	Thr	385	390	395
Val	Val	Gly	Gln	Thr	Ser	Trp	Lys	Pro	Cys	Gly	Pro	Asn	Ala	Trp	Asp	405	410	415
Gln	Ser	Phe	Thr	Leu	Glu	Leu	Glu	Arg	Ala	Arg	Glu	Leu	Glu	Leu	Ala	420	425	430
Val	Phe	Trp	Arg	Asp	Gln	Arg	Gly	Leu	Cys	Ala	Leu	Lys	Phe	Leu	Lys	435	440	445
Leu	Glu	Asp	Phe	Leu	Asp	Asn	Glu	Arg	His	Glu	Val	Gln	Leu	Asp	Met	450	455	460
Glu	Pro	Gln	Gly	Cys	Leu	Val	Ala	Glu	Val	Thr	Phe	Arg	Asn	Pro	Val	465	470	475
Ile	Glu	Arg	Ile	Pro	Arg	Leu	Arg	Arg	Gln	Lys	Lys	Ile	Phe	Ser	Lys	485	490	495
Gln	Gln	Gly	Lys	Ala	Phe	Gln	Arg	Ala	Arg	Gln	Met	Asn	Ile	Asp	Val	500	505	510
Ala	Thr	Trp	Val	Arg	Leu	Leu	Arg	Arg	Leu	Ile	Pro	Asn	Ala	Thr	Gly	515	520	525
Thr	Gly	Thr	Phe	Ser	Pro	Gly	Ala	Ser	Pro	Gly	Ser	Glu	Ala	Arg	Thr	530	535	540
Thr	Gly	Asp	Ile	Ser	Val	Glu	Lys	Leu	Asn	Leu	Gly	Thr	Asp	Ser	Asp	545	550	555
Ser	Ser	Pro	Gln	Lys	Ser	Ser	Arg	Asp	Pro	Pro	Ser	Ser	Pro	Ser	Ser	565	570	575

Leu	Ser	Ser	Pro	Ile	Gln	Glu	Ser	Thr	Ala	Pro	Glu	Leu	Pro	Ser	Glu	580	585	590
Thr	Gln	Glu	Thr	Pro	Gly	Pro	Ala	Leu	Cys	Ser	Pro	Leu	Arg	Lys	Ser	595	600	605
Pro	Leu	Thr	Leu	Glu	Asp	Phe	Lys	Phe	Leu	Ala	Val	Leu	Gly	Arg	Gly	610	615	620
His	Phe	Gly	Lys	Val	Leu	Leu	Ser	Glu	Phe	Arg	Pro	Ser	Gly	Glu	Leu	625	630	635
Phe	Ala	Ile	Lys	Ala	Leu	Lys	Lys	Gly	Asp	Ile	Val	Ala	Arg	Asp	Glu	645	650	655
Val	Glu	Ser	Leu	Met	Cys	Glu	Lys	Arg	Ile	Leu	Ala	Ala	Val	Thr	Ser	660	665	670
Ala	Gly	His	Pro	Phe	Leu	Val	Asn	Leu	Phe	Gly	Cys	Phe	Gln	Thr	Pro	675	680	685
Glu	His	Val	Cys	Phe	Val	Met	Glu	Tyr	Ser	Ala	Gly	Gly	Asp	Leu	Met	690	695	700
Leu	His	Ile	His	Ser	Asp	Val	Phe	Ser	Glu	Pro	Arg	Ala	Ile	Phe	Tyr	705	710	715
Ser	Ala	Cys	Val	Val	Leu	Gly	Leu	Gln	Phe	Leu	His	Glu	His	Lys	Ile	725	730	735
Val	Tyr	Arg	Asp	Leu	Lys	Leu	Asp	Asn	Leu	Leu	Leu	Asp	Thr	Glu	Gly	740	745	750
Tyr	Val	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Met	Gly	Tyr	755	760	765
Gly	Asp	Arg	Thr	Ser	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Phe	Leu	Ala	Pro	770	775	780
Glu	Val	Leu	Thr	Asp	Thr	Ser	Tyr	Thr	Arg	Ala	Val	Asp	Trp	Trp	Gly	785	790	795
Leu	Gly	Val	Leu	Leu	Tyr	Glu	Met	Leu	Val	Gly	Glu	Ser	Pro	Phe	Pro	805	810	815
Gly	Asp	Asp	Glu	Glu	Glu	Val	Phe	Asp	Ser	Ile	Val	Asn	Asp	Glu	Val	820	825	830
Arg	Tyr	Pro	Arg	Phe	Leu	Ser	Ala	Glu	Ala	Ile	Gly	Ile	Met	Arg	Arg	835	840	845
Leu	Leu	Arg	Arg	Asn	Pro	Glu	Arg	Arg	Leu	Gly	Ser	Ser	Glu	Arg	Asp	850	855	860
Ala	Glu	Asp	Val	Lys	Lys	Gln	Pro	Phe	Phe	Arg	Thr	Leu	Gly	Trp	Glu	865	870	875

Ala Leu Leu Ala Arg Arg Leu Pro Pro Pro Phe Val Pro Thr Leu Ser
885 890 895

Gly Arg Thr Asp Val Ser Asn Phe Asp Glu Glu Phe Thr Gly Glu Ala
900 905 910

Pro Thr Leu Ser Pro Pro Arg Asp Ala Arg Pro Leu Thr Ala Ala Glu
915 920 925

Gln Ala Ala Phe Leu Asp Phe Asp Phe Val Ala Gly Gly Cys
930 935 940

<210> 236

<211> 942

<212> PRT

<213> Homo sapiens

<400> 236

Met Ala Ser Asp Ala Val Gln Ser Glu Pro Arg Ser Trp Ser Leu Leu
1 5 10 15

Glu Gln Leu Gly Leu Ala Gly Ala Asp Leu Ala Ala Pro Gly Val Gln
20 25 30

Gln Gln Leu Glu Leu Glu Arg Glu Arg Leu Arg Arg Glu Ile Arg Lys
35 40 45

Glu Leu Lys Leu Lys Glu Gly Ala Glu Asn Leu Arg Arg Ala Thr Thr
50 55 60

Asp Leu Gly Arg Ser Leu Gly Pro Val Glu Leu Leu Leu Arg Gly Ser
65 70 75 80

Ser Arg Arg Leu Asp Leu Leu His Gln Gln Leu Gln Glu Leu His Ala
85 90 95

His Val Val Leu Pro Asp Pro Ala Ala Thr His Asp Gly Pro Gln Ser
100 105 110

Pro Gly Ala Gly Gly Pro Thr Cys Ser Ala Thr Asn Leu Ser Arg Val
115 120 125

Ala Gly Leu Glu Lys Gln Leu Ala Ile Glu Leu Lys Val Lys Gln Gly
130 135 140

Ala Glu Asn Met Ile Gln Thr Tyr Ser Asn Gly Ser Thr Lys Asp Arg
145 150 155 160

Lys Leu Leu Leu Thr Ala Gln Gln Met Leu Gln Asp Ser Lys Thr Lys
165 170 175

Ile Asp Ile Ile Arg Met Gln Leu Arg Arg Ala Leu Gln Ala Gly Gln
180 185 190

Leu Glu Asn Gln Ala Ala Pro Asp Asp Thr Gln Gly Ser Pro Asp Leu
195 200 205

Gly	Ala	Val	Glu	Leu	Arg	Ile	Glu	Glu	Leu	Arg	His	His	Phe	Arg	Val	210	215	220	
Glu	His	Ala	Val	Ala	Glu	Gly	Ala	Lys	Asn	Val	Leu	Arg	Leu	Leu	Ser	225	230	235	240
Ala	Ala	Lys	Ala	Pro	Asp	Arg	Lys	Ala	Val	Ser	Glu	Ala	Gln	Glu	Lys	245	250	255	
Leu	Thr	Glu	Ser	Asn	Gln	Lys	Leu	Gly	Leu	Leu	Arg	Glu	Ala	Leu	Glu	260	265	270	
Arg	Arg	Leu	Gly	Glu	Leu	Pro	Ala	Asp	His	Pro	Lys	Gly	Arg	Leu	Leu	275	280	285	
Arg	Glu	Glu	Leu	Ala	Ala	Ala	Ser	Ser	Ala	Ala	Phe	Ser	Thr	Arg	Leu	290	295	300	
Ala	Gly	Pro	Phe	Pro	Ala	Thr	His	Tyr	Ser	Thr	Leu	Cys	Lys	Pro	Ala	305	310	315	320
Pro	Leu	Thr	Gly	Thr	Leu	Glu	Val	Arg	Val	Val	Gly	Cys	Arg	Asp	Leu	325	330	335	
Pro	Glu	Thr	Ile	Pro	Trp	Asn	Pro	Thr	Pro	Ser	Met	Gly	Gly	Pro	Gly	340	345	350	
Thr	Pro	Asp	Ser	Arg	Pro	Pro	Phe	Leu	Ser	Arg	Pro	Ala	Arg	Gly	Leu	355	360	365	
Tyr	Ser	Arg	Ser	Gly	Ser	Leu	Ser	Gly	Arg	Ser	Ser	Leu	Lys	Ala	Glu	370	375	380	
Ala	Glu	Asn	Thr	Ser	Glu	Val	Ser	Thr	Val	Leu	Lys	Leu	Asp	Asn	Thr	385	390	395	400
Val	Val	Gly	Gln	Thr	Ser	Trp	Lys	Pro	Cys	Gly	Pro	Asn	Ala	Trp	Asp	405	410	415	
Gln	Ser	Phe	Thr	Leu	Glu	Leu	Glu	Arg	Ala	Arg	Glu	Leu	Glu	Leu	Ala	420	425	430	
Val	Phe	Trp	Arg	Asp	Gln	Arg	Gly	Leu	Cys	Ala	Leu	Lys	Phe	Leu	Lys	435	440	445	
Leu	Glu	Asp	Phe	Leu	Asp	Asn	Glu	Arg	His	Glu	Val	Gln	Leu	Asp	Met	450	455	460	
Glu	Pro	Gln	Gly	Cys	Leu	Val	Ala	Glu	Val	Thr	Phe	Arg	Asn	Pro	Val	465	470	475	480
Ile	Glu	Arg	Ile	Pro	Arg	Leu	Arg	Arg	Gln	Lys	Lys	Ile	Phe	Ser	Lys	485	490	495	
Gln	Gln	Gly	Lys	Ala	Phe	Gln	Arg	Ala	Arg	Gln	Met	Asn	Ile	Asp	Val	500	505	510	

Ala Thr Trp Val Arg Leu Leu Arg Arg Leu Ile Pro Asn Ala Thr Gly	515	520	525
Thr Gly Thr Phe Ser Pro Gly Ala Ser Pro Gly Ser Glu Ala Arg Thr	530	535	540
Thr Gly Asp Ile Ser Val Glu Lys Leu Asn Leu Gly Thr Asp Ser Asp	545	550	555 560
Ser Ser Pro Gln Lys Ser Ser Arg Asp Pro Pro Ser Ser Pro Ser Ser	565	570	575
Leu Ser Ser Pro Ile Gln Glu Ser Thr Ala Pro Glu Leu Pro Ser Glu	580	585	590
Thr Gln Glu Thr Pro Gly Pro Ala Leu Cys Ser Pro Leu Arg Lys Ser	595	600	605
Pro Leu Thr Leu Glu Asp Phe Lys Phe Leu Ala Val Leu Gly Arg Gly	610	615	620
His Phe Gly Lys Val Leu Leu Ser Glu Phe Arg Pro Ser Gly Glu Leu	625	630	635 640
Phe Ala Ile Lys Ala Leu Lys Lys Gly Asp Ile Val Ala Arg Asp Glu	645	650	655
Val Glu Ser Leu Met Cys Glu Lys Arg Ile Leu Ala Ala Val Thr Ser	660	665	670
Ala Gly His Pro Phe Leu Val Asn Leu Phe Gly Cys Phe Gln Thr Pro	675	680	685
Glu His Val Cys Phe Val Met Glu Tyr Ser Ala Gly Gly Asp Leu Met	690	695	700
Leu His Ile His Ser Asp Val Phe Ser Glu Pro Arg Ala Ile Phe Tyr	705	710	715 720
Ser Ala Cys Val Val Leu Gly Leu Gln Phe Leu His Glu His Lys Ile	725	730	735
Val Tyr Arg Asp Leu Lys Leu Asp Asn Leu Leu Leu Asp Thr Glu Gly	740	745	750
Tyr Val Lys Ile Ala Asp Phe Gly Leu Cys Lys Glu Gly Met Gly Tyr	755	760	765
Gly Asp Arg Thr Ser Thr Phe Cys Gly Thr Pro Glu Phe Leu Ala Pro	770	775	780
Glu Val Leu Thr Asp Thr Ser Tyr Thr Arg Ala Val Asp Trp Trp Gly	785	790	795 800
Leu Gly Val Leu Leu Tyr Glu Met Leu Val Gly Glu Ser Pro Phe Pro	805	810	815

Gly Asp Asp Glu Glu Glu Val Phe Asp Ser Ile Val Asn Asp Glu Val
820 825 830

Arg Tyr Pro Arg Phe Leu Ser Ala Glu Ala Ile Gly Ile Met Arg Arg
835 840 845

Leu Leu Arg Arg Asn Pro Glu Arg Arg Leu Gly Ser Ser Glu Arg Asp
850 855 860

Ala Glu Asp Val Lys Lys Gln Pro Phe Phe Arg Thr Leu Gly Trp Glu
865 870 875 880

Ala Leu Leu Ala Arg Arg Leu Pro Pro Phe Val Pro Thr Leu Ser
885 890 895

Gly Arg Thr Asp Val Ser Asn Phe Asp Glu Glu Phe Thr Gly Glu Ala
900 905 910

Pro Thr Leu Ser Pro Pro Arg Asp Ala Arg Pro Leu Thr Ala Ala Glu
915 920 925

Gln Ala Ala Phe Leu Asp Phe Asp Phe Val Ala Gly Gly Cys
930 935 940

<210> 237
<211> 452
<212> PRT
<213> Homo sapiens

<400> 237

Met Asp Gln Tyr Cys Ile Leu Gly Arg Ile Gly Glu Gly Ala His Gly
1 5 10 15

Ile Val Phe Lys Ala Lys His Val Glu Thr Gly Glu Ile Ile Ala Leu
20 25 30

Lys Lys Val Ala Leu Arg Arg Leu Glu Asp Gly Phe Pro Asn Gln Ala
35 40 45

Leu Arg Glu Ile Lys Ala Leu Gln Glu Met Glu Asp Asn Gln Tyr Val
50 55 60

Val Gln Leu Lys Ala Val Phe Pro His Gly Gly Gly Phe Val Leu Ala
65 70 75 80

Phe Glu Phe Met Leu Ser Asp Leu Ala Glu Val Val Arg His Ala Gln
85 90 95

Arg Pro Leu Ala Gln Ala Gln Val Lys Ser Tyr Leu Gln Met Leu Leu
100 105 110

Lys Gly Val Ala Phe Cys His Ala Asn Asn Ile Val His Arg Asp Leu
115 120 125

Lys Pro Ala Asn Leu Leu Ile Ser Ala Ser Gly Gln Leu Lys Ile Ala

130	135	140
Asp Phe Gly Leu Ala Arg Val Phe Ser Pro Asp Gly Ser Arg Leu Tyr		
145	150	155 160
Thr His Gln Val Ala Thr Arg Ser Val Gly Cys Ile Met Gly Glu Leu		
	165	170 175
Leu Asn Gly Ser Pro Leu Phe Pro Gly Lys Asn Asp Ile Glu Gln Leu		
	180	185 190
Cys Tyr Val Leu Arg Ile Leu Gly Thr Pro Asn Pro Gln Val Trp Pro		
	195	200 205
Glu Leu Thr Glu Leu Pro Asp Tyr Asn Lys Ile Ser Phe Lys Glu Gln		
	210	215 220
Val Pro Met Pro Leu Glu Glu Val Leu Pro Asp Val Ser Pro Gln Ala		
225	230	235 240
Leu Asp Leu Leu Gly Gln Phe Leu Leu Tyr Pro Pro His Gln Arg Ile		
	245	250 255
Ala Ala Ser Lys Ala Leu Leu His Gln Tyr Phe Phe Thr Ala Pro Leu		
	260	265 270
Pro Ala His Pro Ser Glu Leu Pro Ile Pro Gln Arg Leu Gly Gly Pro		
	275	280 285
Ala Pro Lys Ala His Pro Gly Pro Pro His Ile His Asp Phe His Val		
	290	295 300
Asp Arg Pro Leu Glu Gly Val Ala Val Glu Pro Arg Ala Asp Ser Ala		
305	310	315 320
Leu His Pro Gly Gly Val Arg Ser Trp Pro Trp Ser Arg Leu Pro Ala		
	325	330 335
Pro Gln Asp His Ser Val His Leu Phe Leu Cys His Leu Pro Gly Phe		
	340	345 350
Thr Leu Gln Gly Leu Pro Met Ala Thr Val Gly Pro His His Thr Leu		
	355	360 365
Pro Leu Ser Pro Cys Glu Gly Trp Ser Arg Gly Arg Gly His Val Pro		
	370	375 380
Ser Gln Glu Tyr Glu Asn Ile Gln Ser Ser Arg Gly Asp Ser Trp Pro		
385	390	395 400
Val Leu Gly Glu Pro Tyr Leu Leu Cys Ala Thr Asp Val Pro Ile Arg		
	405	410 415
Thr Val Ser Ser Ala Ala Ser Gln Gly Leu His Met Gln Asn Asp Asp		
	420	425 430
Ala Cys Leu Gly Ala Ala Ser Pro Glu Cys Cys Leu Leu Val Lys Glu		

435	440	445
Lys Cys Arg Glu		
450		
<210> 238		
<211> 454		
<212> PRT		
<213> Homo sapiens		
<400> 238		
Met Ser Thr Phe Arg Gln Glu Asp Val Glu Asp His Tyr Glu Met Gly		
1 5 10 15		
Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val Arg Lys Cys Arg Gln		
20 25 30		
Lys Gly Thr Gly Lys Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg		
35 40 45		
Leu Ser Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu		
50 55 60		
Val Asn Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His		
65 70 75 80		
Asp Ile Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val		
85 90 95		
Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Glu Ser Leu Thr		
100 105 110		
Glu Asp Glu Ala Thr Gln Phe Leu Lys Gln Ile Leu Asp Gly Val His		
115 120 125		
Tyr Leu His Ser Lys Arg Ile Ala His Phe Asp Leu Lys Pro Glu Asn		
130 135 140		
Ile Met Leu Leu Asp Lys Asn Val Pro Asn Pro Arg Ile Lys Leu Ile		
145 150 155 160		
Asp Phe Gly Ile Ala His Lys Ile Glu Ala Gly Asn Glu Phe Lys Asn		
165 170 175		
Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu		
180 185 190		
Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr		
195 200 205		
Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Glu Thr Lys Gln Glu		
210 215 220		
Thr Leu Thr Asn Ile Ser Ala Val Asn Tyr Asp Phe Asp Glu Glu Tyr		
225 230 235 240		

Phe Ser Asn Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Arg Leu Leu
245 250 255

Val Lys Asp Pro Lys Arg Arg Met Thr Ile Ala Gln Ser Leu Glu His
260 265 270

Ser Trp Ile Lys Ala Ile Arg Arg Arg Asn Val Arg Gly Glu Asp Ser
275 280 285

Gly Arg Lys Pro Glu Arg Arg Arg Leu Lys Thr Thr Arg Leu Lys Glu
290 295 300

Tyr Thr Ile Lys Ser His Ser Ser Leu Pro Pro Asn Asn Ser Tyr Ala
305 310 315 320

Asp Phe Glu Arg Phe Ser Lys Val Leu Glu Glu Ala Ala Ala Ala Glu
325 330 335

Glu Gly Leu Arg Glu Leu Gln Arg Ser Arg Arg Leu Cys His Glu Asp
340 345 350

Val Glu Ala Leu Ala Ala Ile Tyr Glu Glu Lys Glu Ala Trp Tyr Arg
355 360 365

Glu Glu Ser Asp Ser Leu Gly Gln Asp Leu Arg Arg Leu Arg Gln Glu
370 375 380

Leu Leu Lys Thr Glu Ala Leu Lys Arg Gln Ala Gln Glu Glu Ala Lys
385 390 395 400

Gly Ala Leu Leu Gly Thr Ser Gly Leu Lys Arg Arg Phe Ser Arg Leu
405 410 415

Glu Asn Arg Tyr Glu Ala Leu Ala Lys Gln Val Ala Ser Glu Met Arg
420 425 430

Phe Val Gln Asp Leu Val Arg Ala Leu Glu Gln Glu Lys Leu Gln Gly
435 440 445

Val Glu Cys Gly Leu Arg
450

<210> 239

<211> 1065

<212> PRT

<213> Homo sapiens

<400> 239

Met Asp Ala Ala Gly Arg Gly Cys His Leu Leu Pro Leu Pro Ala Ala
1 5 10 15

Arg Gly Pro Ala Arg Ala Pro Ala Ala Ala Ala Ala Ala Ala Ser
20 25 30

Pro Pro Gly Pro Cys Ser Gly Ala Ala Cys Ala Pro Ser Ala Ala Ala
35 40 45

Gly	Ala	Gly	Ala	Met	Asn	Pro	Ser	Ser	Ser	Ala	Gly	Glu	Glu	Lys	Gly	50	55	60
Ala	Thr	Gly	Gly	Ser	Ser	Ser	Ser	Gly	Ser	Gly	Ala	Gly	Ser	Cys	Cys	65	70	75
Leu	Gly	Ala	Glu	Gly	Gly	Ala	Asp	Pro	Arg	Gly	Ala	Gly	Ser	Ala	Ala	85	90	95
Ala	Ala	Gly	Ala	Ala	Ala	Leu	Asp	Glu	Pro	Ala	Ala	Ala	Gly	Gln	Lys	100	105	110
Glu	Lys	Asp	Glu	Ala	Leu	Glu	Glu	Lys	Leu	Arg	Asn	Leu	Thr	Phe	Arg	115	120	125
Lys	Gln	Val	Ser	Tyr	Arg	Lys	Ala	Ile	Ser	Arg	Ala	Gly	Leu	Gln	His	130	135	140
Leu	Ala	Pro	Ala	His	Pro	Leu	Ser	Leu	Pro	Val	Ala	Asn	Gly	Pro	Ala	145	150	155
Lys	Glu	Pro	Arg	Ala	Thr	Leu	Asp	Trp	Ser	Glu	Asn	Ala	Val	Asn	Gly	165	170	175
Glu	His	Leu	Trp	Leu	Glu	Thr	Asn	Val	Ser	Gly	Asp	Leu	Cys	Tyr	Leu	180	185	190
Gly	Glu	Glu	Asn	Cys	Gln	Val	Arg	Phe	Ala	Lys	Ser	Ala	Leu	Arg	Arg	195	200	205
Lys	Cys	Ala	Val	Cys	Lys	Ile	Val	Val	His	Thr	Ala	Cys	Ile	Glu	Gln	210	215	220
Leu	Glu	Lys	Ile	Asn	Phe	Arg	Cys	Lys	Pro	Thr	Phe	Arg	Glu	Gly	Gly	225	230	235
Ser	Arg	Ser	Pro	Arg	Glu	Asn	Phe	Val	Arg	His	His	Trp	Val	His	Arg	245	250	255
Arg	Arg	Gln	Glu	Gly	Lys	Cys	Lys	Gln	Cys	Gly	Lys	Gly	Phe	Gln	Gln	260	265	270
Lys	Phe	Ser	Phe	His	Ser	Lys	Glu	Ile	Val	Ala	Ile	Ser	Cys	Ser	Trp	275	280	285
Cys	Lys	Gln	Ala	Phe	His	Asn	Lys	Val	Thr	Cys	Phe	Met	Leu	His	His	290	295	300
Ile	Glu	Glu	Pro	Cys	Ser	Leu	Gly	Ala	His	Ala	Ala	Val	Ile	Val	Pro	305	310	315
Pro	Thr	Trp	Ile	Ile	Lys	Val	Lys	Lys	Pro	Gln	Asn	Ser	Leu	Lys	Ala	325	330	335
Ser	Asn	Arg	Lys	Lys	Lys	Arg	Thr	Ser	Phe	Lys	Arg	Lys	Ala	Ser	Lys	340	345	350

Arg Gly Met Glu Gln Glu Asn Lys Gly Arg Pro Phe Val Ile Lys Pro	355	360	365
Ile Ser Ser Pro Leu Met Lys Pro Leu Leu Val Phe Val Asn Pro Lys	370	375	380
Ser Gly Gly Asn Gln Gly Thr Lys Val Leu Gln Met Phe Met Trp Tyr	385	390	395 400
Leu Asn Pro Arg Gln Val Phe Asp Leu Ser Gln Glu Gly Pro Lys Asp	405	410	415
Ala Leu Glu Leu Tyr Arg Lys Val Pro Asn Leu Arg Ile Leu Ala Cys	420	425	430
Gly Gly Asp Gly Thr Val Gly Trp Ile Leu Ser Ile Leu Asp Glu Leu	435	440	445
Gln Leu Ser Pro Gln Pro Pro Val Gly Val Leu Pro Leu Gly Thr Gly	450	455	460
Asn Asp Leu Ala Arg Thr Leu Asn Trp Gly Gly Gly Tyr Thr Asp Glu	465	470	475 480
Pro Val Ser Lys Ile Leu Cys Gln Val Glu Asp Gly Thr Val Val Gln	485	490	495
Leu Asp Arg Trp Asn Leu His Val Glu Arg Asn Pro Asp Leu Pro Pro	500	505	510
Glu Glu Leu Glu Asp Gly Val Cys Lys Leu Pro Leu Asn Val Phe Asn	515	520	525
Asn Tyr Phe Ser Leu Gly Phe Asp Ala His Val Thr Leu Glu Phe His	530	535	540
Glu Ser Arg Glu Ala Asn Pro Glu Lys Phe Asn Ser Arg Phe Arg Asn	545	550	555 560
Lys Met Phe Tyr Ala Gly Ala Ala Phe Ser Asp Phe Leu Gln Arg Ser	565	570	575
Ser Arg Asp Leu Ser Lys His Val Lys Val Val Cys Asp Gly Thr Asp	580	585	590
Leu Thr Pro Lys Ile Gln Glu Leu Lys Phe Gln Cys Ile Val Phe Leu	595	600	605
Asn Ile Pro Arg Tyr Cys Ala Gly Thr Met Pro Trp Gly Asn Pro Gly	610	615	620
Asp His His Asp Phe Glu Pro Gln Arg His Asp Asp Gly Tyr Ile Glu	625	630	635 640
Val Ile Gly Phe Thr Met Ala Ser Leu Ala Ala Leu Gln Val Gly Gly	645	650	655

His	Gly	Glu	Arg	Leu	His	Gln	Cys	Arg	Glu	Val	Met	Leu	Leu	Thr	Tyr	660	665	670	
Lys	Ser	Ile	Pro	Met	Gln	Val	Asp	Gly	Glu	Pro	Cys	Arg	Leu	Ala	Pro	675	680	685	
Ala	Met	Ile	Arg	Ile	Ser	Leu	Arg	Asn	Gln	Ala	Asn	Met	Val	Gln	Lys	690	695	700	
Ser	Lys	Arg	Arg	Thr	Ser	Met	Pro	Leu	Leu	Asn	Asp	Pro	Gln	Ser	Val	705	710	715	720
Pro	Asp	Arg	Leu	Arg	Ile	Arg	Val	Asn	Lys	Ile	Ser	Leu	Gln	Asp	Tyr	725	730	735	
Glu	Gly	Phe	His	Tyr	Asp	Lys	Glu	Lys	Leu	Arg	Glu	Ala	Ser	Ile	Ser	740	745	750	
Asp	Trp	Leu	Arg	Thr	Ile	Ala	Gly	Glu	Leu	Val	Gln	Ser	Phe	Gly	Ala	755	760	765	
Ile	Pro	Leu	Gly	Ile	Leu	Val	Val	Arg	Gly	Asp	Cys	Asp	Leu	Glu	Thr	770	775	780	
Cys	Arg	Met	Tyr	Ile	Asp	Arg	Leu	Gln	Glu	Asp	Leu	Gln	Ser	Val	Ser	785	790	795	800
Ser	Gly	Ser	Gln	Arg	Val	His	Tyr	Gln	Asp	His	Glu	Thr	Ser	Phe	Pro	805	810	815	
Arg	Ala	Leu	Ser	Ala	Gln	Arg	Leu	Ser	Pro	Arg	Trp	Cys	Phe	Leu	Asp	820	825	830	
Asp	Arg	Ser	Gln	Glu	His	Leu	His	Phe	Val	Met	Glu	Ile	Ser	Gln	Asp	835	840	845	
Glu	Ile	Phe	Ile	Leu	Asp	Pro	Asp	Met	Val	Val	Ser	Gln	Pro	Ala	Gly	850	855	860	
Thr	Pro	Pro	Gly	Met	Pro	Asp	Leu	Val	Val	Glu	Gln	Ala	Ser	Gly	Ile	865	870	875	880
Ser	Asp	Trp	Trp	Asn	Pro	Ala	Leu	Arg	Lys	Arg	Met	Leu	Ser	Asp	Ser	885	890	895	
Gly	Leu	Gly	Met	Ile	Ala	Pro	Tyr	Tyr	Glu	Asp	Ser	Asp	Leu	Lys	Asp	900	905	910	
Leu	Ser	His	Ser	Arg	Val	Leu	Gln	Ser	Pro	Val	Ser	Ser	Glu	Asp	His	915	920	925	
Ala	Ile	Leu	Gln	Ala	Val	Ile	Ala	Gly	Asp	Leu	Met	Lys	Leu	Ile	Glu	930	935	940	
Ser	Tyr	Lys	Asn	Gly	Gly	Ser	Leu	Leu	Ile	Gln	Gly	Pro	Asp	His	Cys	945	950	955	960

Ser Leu Leu His Tyr Ala Ala Lys Thr Gly Asn Gly Glu Ile Val Lys
 965 970 975

Tyr Ile Leu Asp His Gly Pro Ser Glu Leu Leu Asp Met Ala Asp Ser
 980 985 990

Glu Thr Gly Glu Thr Ala Leu His Lys Ala Ala Cys Gln Arg Asn Arg
 995 1000 1005

Ala Val Cys Gln Leu Leu Val Asp Ala Gly Ala Ser Leu Arg Lys
 1010 1015 1020

Thr Asp Ser Lys Gly Lys Thr Pro Gln Glu Arg Ala Gln Gln Ala
 1025 1030 1035

Gly Asp Pro Asp Leu Ala Ala Tyr Leu Glu Ser Arg Gln Asn Tyr
 1040 1045 1050

Lys Val Ile Gly His Glu Asp Leu Glu Thr Ala Val
 1055 1060 1065

<210> 240
 <211> 606
 <212> PRT
 <213> Homo sapiens

<400> 240

Met Arg Gly Ala Ala Arg Leu Gly Arg Pro Gly Arg Ser Cys Leu Pro
 1 5 10 15

Gly Pro Ala Leu Arg Ala Ala Ala Ala Pro Ala Leu Leu Leu Ala Arg
 20 25 30

Cys Ala Val Ala Ala Ala Ala Gly Leu Arg Ala Ala Ala Arg Pro Arg
 35 40 45

Pro Pro Glu Leu Gln Ser Ala Ser Ala Gly Pro Ser Val Ser Leu Tyr
 50 55 60

Leu Ser Glu Asp Glu Val Arg Arg Leu Ile Gly Leu Asp Ala Glu Leu
 65 70 75 80

Tyr Tyr Val Arg Asn Asp Leu Ile Ser His Tyr Ala Leu Ser Phe Asn
 85 90 95

Leu Leu Val Pro Ser Glu Thr Asn Phe Leu His Phe Thr Trp His Ala
 100 105 110

Lys Ser Lys Val Glu Tyr Lys Leu Gly Phe Gln Val Asp Asn Val Leu
 115 120 125

Ala Met Asp Met Pro Gln Val Asn Ile Ser Val Gln Gly Glu Val Pro
 130 135 140

Arg Thr Leu Ser Val Phe Arg Val Glu Leu Ser Cys Thr Gly Lys Val

145		150		155		160
Asp Ser Glu Val Met	Ile Leu Met Gln Leu Asn Leu Thr Val	Asn Ser				
	165		170			175
Ser Lys Asn Phe Thr Val	Leu Asn Phe Lys Arg Arg Lys Met Cys Tyr					
	180		185			190
Lys Lys Leu Glu Glu Val	Lys Thr Ser Ala Leu Asp Lys Asn Thr Ser					
	195		200			205
Arg Thr Ile Tyr Asp Pro	Val His Ala Ala Pro Thr Thr Ser Thr Arg					
	210		215			220
Val Phe Tyr Ile Ser Val	Gly Val Cys Cys Ala Val Ile Phe Leu Val					
	225		230			235
Ala Ile Ile Leu Ala Val	Leu His Leu His Asn Met Lys Arg Ile Glu					
	245		250			255
Leu Asp Asp Ser Ile Ser	Ala Ser Ser Ser Ser Gln Gly Leu Ser Gln					
	260		265			270
Pro Ser Thr Gln Thr Thr	Gln Tyr Leu Arg Ala Asp Thr Pro Asn Asn					
	275		280			285
Ala Thr Pro Ile Thr Ser	Tyr Pro Thr Leu Arg Ile Glu Lys Asn Asp					
	290		295			300
Leu Arg Ser Val Thr Leu	Leu Glu Ala Lys Gly Lys Val Lys Asp Ile					
	305		310			315
Ala Ile Ser Arg Glu Arg	Ile Thr Leu Lys Asp Val Leu Gln Glu Gly					
	325		330			335
Thr Phe Gly Arg Ile Phe	His Gly Ile Leu Ile Asp Glu Lys Asp Pro					
	340		345			350
Asn Lys Glu Lys Gln Ala	Phe Val Lys Thr Val Lys Asp Gln Ala Ser					
	355		360			365
Glu Ile Gln Val Thr Met	Met Leu Thr Glu Ser Cys Lys Leu Arg Gly					
	370		375			380
Leu His His Arg Asn Leu	Leu Pro Ile Thr His Val Cys Ile Glu Glu					
	385		390			395
Gly Glu Lys Pro Met Val	Ile Leu Pro Tyr Met Asn Trp Gly Asn Leu					
	405		410			415
Lys Leu Phe Leu Arg Gln	Cys Lys Leu Val Glu Ala Asn Asn Pro Gln					
	420		425			430
Ala Ile Ser Gln Gln Asp	Leu Val His Met Ala Ile Gln Ile Ala Cys					
	435		440			445
Gly Met Ser Tyr Leu Ala	Arg Arg Glu Val Ile His Lys Asp Leu Ala					

450	455	460
Ala Arg Asn Cys Val Ile Asp Asp Thr Leu Gln Val Lys Ile Thr Asp		
465	470	475 480
Asn Ala Leu Ser Arg Asp Leu Phe Pro Met Asp Tyr His Cys Leu Gly		
	485	490 495
Asp Asn Glu Asn Arg Pro Val Arg Trp Met Ala Leu Glu Ser Leu Val		
	500	505 510
Asn Asn Glu Phe Ser Ser Ala Ser Asp Val Trp Ala Phe Gly Val Asn		
	515	520 525
Ser Leu Trp Glu Leu Met Thr Leu Gly Gln Thr Pro Tyr Thr Leu Asp		
	530	535 540
Ile Asp Pro Phe Glu Met Ala Ala Tyr Leu Lys Asp Gly Tyr Arg Ile		
545	550	555 560
Ala Gln Pro Ile Thr Cys Pro Asp Glu Leu Phe Ala Val Met Ala Cys		
	565	570 575
Cys Trp Ala Leu Asp Pro Glu Glu Arg Pro Arg Phe Gln Gln Leu Val		
	580	585 590
Gln Cys Leu Thr Glu Phe His Ala Ala Leu Gly Ala Tyr Val		
	595	600 605
<210> 241		
<211> 606		
<212> PRT		
<213> Homo sapiens		
<400> 241		
Met Arg Gly Ala Ala Arg Leu Gly Arg Pro Gly Arg Ser Cys Leu Pro		
1	5	10 15
Gly Pro Ala Leu Arg Ala Ala Ala Ala Pro Ala Leu Leu Leu Ala Arg		
	20	25 30
Cys Ala Val Ala Ala Ala Ala Gly Leu Arg Ala Ala Ala Arg Pro Arg		
	35	40 45
Pro Pro Glu Leu Gln Ser Ala Ser Ala Gly Pro Ser Val Ser Leu Tyr		
	50	55 60
Leu Ser Glu Asp Glu Val Arg Arg Leu Ile Gly Leu Asp Ala Glu Leu		
65	70	75 80
Tyr Tyr Val Arg Asn Asp Leu Ile Ser His Tyr Ala Leu Ser Phe Asn		
	85	90 95
Leu Leu Val Pro Ser Glu Thr Asn Phe Leu His Phe Thr Trp His Ala		
	100	105 110

Lys	Ser	Lys	Val	Glu	Tyr	Lys	Leu	Gly	Phe	Gln	Val	Asp	Asn	Val	Leu	115	120	125
Ala	Met	Asp	Met	Pro	Gln	Val	Asn	Ile	Ser	Val	Gln	Gly	Glu	Val	Pro	130	135	140
Arg	Thr	Leu	Ser	Val	Phe	Arg	Val	Glu	Leu	Ser	Cys	Thr	Gly	Lys	Val	145	150	155
Asp	Ser	Glu	Val	Met	Ile	Leu	Met	Gln	Leu	Asn	Leu	Thr	Val	Asn	Ser	165	170	175
Ser	Lys	Asn	Phe	Thr	Val	Leu	Asn	Phe	Lys	Arg	Arg	Lys	Met	Cys	Tyr	180	185	190
Lys	Lys	Leu	Glu	Glu	Val	Lys	Thr	Ser	Ala	Leu	Asp	Lys	Asn	Thr	Ser	195	200	205
Arg	Thr	Ile	Tyr	Asp	Pro	Val	His	Ala	Ala	Pro	Thr	Thr	Ser	Thr	Arg	210	215	220
Val	Phe	Tyr	Ile	Ser	Val	Gly	Val	Cys	Cys	Ala	Val	Ile	Phe	Leu	Val	225	230	235
Ala	Ile	Ile	Leu	Ala	Val	Leu	His	Leu	His	Asn	Met	Lys	Arg	Ile	Glu	245	250	255
Leu	Asp	Asp	Ser	Ile	Ser	Ala	Ser	Ser	Ser	Ser	Gln	Gly	Leu	Ser	Gln	260	265	270
Pro	Ser	Thr	Gln	Thr	Thr	Gln	Tyr	Leu	Arg	Ala	Asp	Thr	Pro	Asn	Asn	275	280	285
Ala	Thr	Pro	Ile	Thr	Ser	Tyr	Pro	Thr	Leu	Arg	Ile	Glu	Lys	Asn	Asp	290	295	300
Leu	Arg	Ser	Val	Thr	Leu	Leu	Glu	Ala	Lys	Gly	Lys	Val	Lys	Asp	Ile	305	310	315
Ala	Ile	Ser	Arg	Glu	Arg	Ile	Thr	Leu	Lys	Asp	Val	Leu	Gln	Glu	Gly	325	330	335
Thr	Phe	Gly	Arg	Ile	Phe	His	Gly	Ile	Leu	Ile	Asp	Glu	Lys	Asp	Pro	340	345	350
Asn	Lys	Glu	Lys	Gln	Ala	Phe	Val	Lys	Thr	Val	Lys	Asp	Gln	Ala	Ser	355	360	365
Glu	Ile	Gln	Val	Thr	Met	Met	Leu	Thr	Glu	Ser	Cys	Lys	Leu	Arg	Gly	370	375	380
Leu	His	His	Arg	Asn	Leu	Leu	Pro	Ile	Thr	His	Val	Cys	Ile	Glu	Glu	385	390	395
Gly	Glu	Lys	Pro	Met	Val	Ile	Leu	Pro	Tyr	Met	Asn	Trp	Gly	Asn	Leu	405	410	415

Lys Leu Phe Leu Arg Gln Cys Lys Leu Val Glu Ala Asn Asn Pro Gln
 420 425 430
 Ala Ile Ser Gln Gln Asp Leu Val His Met Ala Ile Gln Ile Ala Cys
 435 440 445
 Gly Met Ser Tyr Leu Ala Arg Arg Glu Val Ile His Lys Asp Leu Ala
 450 455 460
 Ala Arg Asn Cys Val Ile Asp Asp Thr Leu Gln Val Lys Ile Thr Asp
 465 470 475 480
 Asn Ala Leu Ser Arg Asp Leu Phe Pro Met Asp Tyr His Cys Leu Gly
 485 490 495
 Asp Asn Glu Asn Arg Pro Val Arg Trp Met Ala Leu Glu Ser Leu Val
 500 505 510
 Asn Asn Glu Phe Ser Ser Ala Ser Asp Val Trp Ala Phe Gly Val Asn
 515 520 525
 Ser Leu Trp Glu Leu Met Thr Leu Gly Gln Thr Pro Tyr Thr Leu Asp
 530 535 540
 Ile Asp Pro Phe Glu Met Ala Ala Tyr Leu Lys Asp Gly Tyr Arg Ile
 545 550 555 560
 Ala Gln Pro Ile Thr Cys Pro Asp Glu Leu Phe Ala Val Met Ala Cys
 565 570 575
 Cys Trp Ala Leu Asp Pro Glu Glu Arg Pro Arg Phe Gln Gln Leu Val
 580 585 590
 Gln Cys Leu Thr Glu Phe His Ala Ala Leu Gly Ala Tyr Val
 595 600 605

<210> 242
 <211> 625
 <212> PRT
 <213> Homo sapiens

<400> 242

Met Ser Ala Glu Val Arg Leu Arg Arg Leu Gln Gln Leu Val Leu Asp
 1 5 10 15
 Pro Gly Phe Leu Gly Leu Glu Pro Leu Leu Asp Leu Leu Leu Gly Val
 20 25 30
 His Gln Glu Leu Gly Ala Ser Glu Leu Ala Gln Asp Lys Tyr Val Ala
 35 40 45
 Asp Phe Leu Gln Trp Ala Glu Pro Ile Val Val Arg Leu Lys Glu Val
 50 55 60
 Arg Leu Gln Arg Asp Asp Phe Glu Ile Leu Lys Val Ile Gly Arg Gly
 65 70 75 80

Ala	Phe	Ser	Glu	Val	Ala	Val	Val	Lys	Met	Lys	Gln	Thr	Gly	Gln	Val		
				85					90					95			
Tyr	Ala	Met	Lys	Ile	Met	Asn	Lys	Trp	Asp	Met	Leu	Lys	Arg	Gly	Glu		
			100					105					110				
Val	Ser	Cys	Phe	Arg	Glu	Glu	Arg	Asp	Val	Leu	Val	Asn	Gly	Asp	Arg		
		115					120					125					
Arg	Trp	Ile	Thr	Gln	Leu	His	Phe	Ala	Phe	Gln	Asp	Glu	Asn	Tyr	Leu		
	130					135					140						
Tyr	Leu	Val	Met	Glu	Tyr	Tyr	Val	Gly	Gly	Asp	Leu	Leu	Thr	Leu	Leu		
145					150					155					160		
Ser	Lys	Phe	Gly	Glu	Arg	Ile	Pro	Ala	Glu	Met	Ala	Arg	Phe	Tyr	Leu		
			165						170					175			
Ala	Glu	Ile	Val	Met	Ala	Ile	Asp	Ser	Val	His	Arg	Leu	Gly	Tyr	Val		
			180					185					190				
His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Ile	Leu	Leu	Asp	Arg	Cys	Gly	His		
		195					200					205					
Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu	Lys	Leu	Arg	Ala	Asp	Gly		
	210					215					220						
Thr	Val	Arg	Ser	Leu	Val	Ala	Val	Gly	Thr	Pro	Asp	Tyr	Leu	Ser	Pro		
225				230						235					240		
Glu	Ile	Leu	Gln	Ala	Val	Gly	Gly	Gly	Pro	Gly	Thr	Gly	Ser	Tyr	Gly		
			245						250					255			
Pro	Glu	Cys	Asp	Trp	Trp	Ala	Leu	Gly	Val	Phe	Ala	Tyr	Glu	Met	Phe		
		260					265						270				
Tyr	Gly	Gln	Thr	Pro	Phe	Tyr	Ala	Asp	Ser	Thr	Ala	Glu	Thr	Tyr	Gly		
	275						280					285					
Lys	Ile	Val	His	Tyr	Lys	Glu	His	Leu	Ser	Leu	Pro	Leu	Val	Asp	Glu		
	290					295					300						
Gly	Val	Pro	Glu	Glu	Ala	Arg	Asp	Phe	Ile	Gln	Arg	Leu	Leu	Cys	Pro		
305					310					315				320			
Pro	Glu	Thr	Arg	Leu	Gly	Arg	Gly	Gly	Ala	Gly	Asp	Phe	Arg	Thr	His		
			325						330					335			
Pro	Phe	Phe	Phe	Gly	Leu	Asp	Trp	Asp	Gly	Leu	Arg	Asp	Ser	Val	Pro		
			340				345						350				
Pro	Phe	Thr	Pro	Asp	Phe	Glu	Gly	Ala	Thr	Asp	Thr	Cys	Asn	Phe	Asp		
		355					360					365					
Leu	Val	Glu	Asp	Gly	Leu	Thr	Ala	Met	Glu	Thr	Leu	Ser	Asp	Ile	Arg		
	370					375					380						

Glu Gly Ala Pro Leu Gly Val His Leu Pro Phe Val Gly Tyr Ser Tyr
385 390 395 400

Ser Cys Met Ala Leu Arg Asp Ser Glu Val Pro Gly Pro Thr Pro Met
405 410 415

Glu Leu Glu Ala Glu Gln Leu Leu Glu Pro His Val Gln Ala Pro Ser
420 425 430

Leu Glu Pro Ser Val Ser Pro Gln Asp Glu Thr Ala Glu Val Ala Val
435 440 445

Pro Ala Ala Val Pro Ala Ala Glu Ala Glu Ala Glu Val Thr Leu Arg
450 455 460

Glu Leu Gln Glu Pro Leu Glu Glu Glu Val Leu Thr Arg Gln Ser Leu
465 470 475 480

Ser Arg Glu Met Glu Ala Ile Arg Thr Asp Asn Gln Asn Phe Ala Ser
485 490 495

Gln Leu Arg Glu Ala Glu Ala Arg Asn Arg Asp Leu Glu Ala His Val
500 505 510

Arg Gln Leu Gln Glu Arg Met Glu Leu Leu Gln Ala Glu Gly Ala Thr
515 520 525

Ala Val Thr Gly Val Pro Ser Pro Arg Ala Thr Asp Pro Pro Ser His
530 535 540

Met Ala Pro Arg Pro Trp Leu Trp Ala Ser Ala Arg Trp Trp Gly Gln
545 550 555 560

Ala Pro Cys Thr Ala Ala Thr Cys Cys Ser Leu Pro Gly Ser Leu Gly
565 570 575

Leu Ala Tyr Arg Arg Arg Phe Pro Cys Ser Cys Ser Pro Leu Phe Cys
580 585 590

Leu Val Pro Pro Pro Trp Ala Ala Leu Gly Trp Trp Pro Thr Pro Ala
595 600 605

Asn Ser Pro Gln Ser Gly Ala Ala Gln Glu Pro Pro Ala Leu Pro Glu
610 615 620

Pro
625

<210> 243

<211> 625

<212> PRT

<213> Homo sapiens

<400> 243

Met Ser Ala Glu Val Arg Leu Arg Arg Leu Gln Gln Leu Val Leu Asp

1	5	10	15
Pro Gly Phe Leu Gly Leu Glu Pro Leu Leu Asp Leu Leu Leu Gly Val	20	25	30
His Gln Glu Leu Gly Ala Ser Glu Leu Ala Gln Asp Lys Tyr Val Ala	35	40	45
Asp Phe Leu Gln Trp Ala Glu Pro Ile Val Val Arg Leu Lys Glu Val	50	55	60
Arg Leu Gln Arg Asp Asp Phe Glu Ile Leu Lys Val Ile Gly Arg Gly	65	70	75
Ala Phe Ser Glu Val Ala Val Val Lys Met Lys Gln Thr Gly Gln Val	85	90	95
Tyr Ala Met Lys Ile Met Asn Lys Trp Asp Met Leu Lys Arg Gly Glu	100	105	110
Val Ser Cys Phe Arg Glu Glu Arg Asp Val Leu Val Asn Gly Asp Arg	115	120	125
Arg Trp Ile Thr Gln Leu His Phe Ala Phe Gln Asp Glu Asn Tyr Leu	130	135	140
Tyr Leu Val Met Glu Tyr Tyr Val Gly Gly Asp Leu Leu Thr Leu Leu	145	150	155
Ser Lys Phe Gly Glu Arg Ile Pro Ala Glu Met Ala Arg Phe Tyr Leu	165	170	175
Ala Glu Ile Val Met Ala Ile Asp Ser Val His Arg Leu Gly Tyr Val	180	185	190
His Arg Asp Ile Lys Pro Asp Asn Ile Leu Leu Asp Arg Cys Gly His	195	200	205
Ile Arg Leu Ala Asp Phe Gly Ser Cys Leu Lys Leu Arg Ala Asp Gly	210	215	220
Thr Val Arg Ser Leu Val Ala Val Gly Thr Pro Asp Tyr Leu Ser Pro	225	230	235
Glu Ile Leu Gln Ala Val Gly Gly Gly Pro Gly Thr Gly Ser Tyr Gly	245	250	255
Pro Glu Cys Asp Trp Trp Ala Leu Gly Val Phe Ala Tyr Glu Met Phe	260	265	270
Tyr Gly Gln Thr Pro Phe Tyr Ala Asp Ser Thr Ala Glu Thr Tyr Gly	275	280	285
Lys Ile Val His Tyr Lys Glu His Leu Ser Leu Pro Leu Val Asp Glu	290	295	300
Gly Val Pro Glu Glu Ala Arg Asp Phe Ile Gln Arg Leu Leu Cys Pro			

305		310		315		320
Pro Glu Thr Arg	Leu Gly Arg Gly Gly Ala Gly Asp Phe Arg Thr His	325		330		335
Pro Phe Phe Phe Gly Leu Asp Trp Asp Gly Leu Arg Asp Ser Val Pro		340		345		350
Pro Phe Thr Pro Asp Phe Glu Gly Ala Thr Asp Thr Cys Asn Phe Asp		355		360		365
Leu Val Glu Asp Gly Leu Thr Ala Met Glu Thr Leu Ser Asp Ile Arg		370		375		380
Glu Gly Ala Pro Leu Gly Val His Leu Pro Phe Val Gly Tyr Ser Tyr		385		390		395
Ser Cys Met Ala Leu Arg Asp Ser Glu Val Pro Gly Pro Thr Pro Met		405		410		415
Glu Leu Glu Ala Glu Gln Leu Leu Glu Pro His Val Gln Ala Pro Ser		420		425		430
Leu Glu Pro Ser Val Ser Pro Gln Asp Glu Thr Ala Glu Val Ala Val		435		440		445
Pro Ala Ala Val Pro Ala Ala Glu Ala Glu Ala Glu Val Thr Leu Arg		450		455		460
Glu Leu Gln Glu Pro Leu Glu Glu Glu Val Leu Thr Arg Gln Ser Leu		465		470		475
Ser Arg Glu Met Glu Ala Ile Arg Thr Asp Asn Gln Asn Phe Ala Ser		485		490		495
Gln Leu Arg Glu Ala Glu Ala Arg Asn Arg Asp Leu Glu Ala His Val		500		505		510
Arg Gln Leu Gln Glu Arg Met Glu Leu Leu Gln Ala Glu Gly Ala Thr		515		520		525
Ala Val Thr Gly Val Pro Ser Pro Arg Ala Thr Asp Pro Pro Ser His		530		535		540
Met Ala Pro Arg Pro Trp Leu Trp Ala Ser Ala Arg Trp Trp Gly Gln		545		550		555
Ala Pro Cys Thr Ala Ala Thr Cys Cys Ser Leu Pro Gly Ser Leu Gly		565		570		575
Leu Ala Tyr Arg Arg Arg Phe Pro Cys Ser Cys Ser Pro Leu Phe Cys		580		585		590
Leu Val Pro Pro Pro Trp Ala Ala Leu Gly Trp Trp Pro Thr Pro Ala		595		600		605
Asn Ser Pro Gln Ser Gly Ala Ala Gln Glu Pro Pro Ala Leu Pro Glu						

610

615

620

Pro
625

<210> 244
 <211> 624
 <212> PRT
 <213> Homo sapiens
 <400> 244

Met Glu Ile Pro Gly Ser Leu Cys Lys Lys Val Lys Leu Ser Asn Asn
 1 5 10 15

Ala Gln Asn Trp Gly Met Gln Arg Ala Thr Asn Val Thr Tyr Gln Ala
 20 25 30

His His Val Ser Arg Asn Lys Arg Gly Gln Val Val Gly Thr Arg Gly
 35 40 45

Gly Phe Arg Gly Cys Thr Val Trp Leu Thr Gly Leu Ser Gly Ala Gly
 50 55 60

Lys Thr Thr Val Ser Met Ala Leu Glu Glu Tyr Leu Val Cys His Gly
 65 70 75 80

Ile Pro Cys Tyr Thr Leu Asp Gly Asp Asn Ile Arg Gln Gly Leu Asn
 85 90 95

Lys Asn Leu Gly Phe Ser Pro Glu Asp Arg Glu Glu Asn Val Arg Arg
 100 105 110

Ile Ala Glu Val Ala Lys Leu Phe Ala Asp Ala Gly Leu Val Cys Ile
 115 120 125

Thr Ser Phe Ile Ser Pro Tyr Thr Gln Asp Arg Asn Asn Ala Arg Gln
 130 135 140

Ile His Glu Gly Ala Ser Leu Pro Phe Phe Glu Val Phe Val Asp Ala
 145 150 155 160

Pro Leu His Val Cys Glu Gln Arg Asp Val Lys Gly Leu Tyr Lys Lys
 165 170 175

Ala Arg Ala Gly Glu Ile Lys Gly Phe Thr Gly Ile Asp Ser Glu Tyr
 180 185 190

Glu Lys Pro Glu Ala Pro Glu Leu Val Leu Lys Thr Asp Ser Cys Asp
 195 200 205

Val Asn Asp Cys Val Gln Gln Val Val Glu Leu Leu Gln Glu Arg Asp
 210 215 220

Ile Val Pro Val Asp Ala Ser Tyr Glu Val Lys Glu Leu Tyr Val Pro
 225 230 235 240

Glu	Asn	Lys	Leu	His	Leu	Ala	Lys	Thr	Asp	Ala	Glu	Thr	Leu	Pro	Ala		
				245					250					255			
Leu	Lys	Ile	Asn	Lys	Val	Asp	Met	Gln	Trp	Val	Gln	Val	Leu	Ala	Glu		
			260					265					270				
Gly	Trp	Ala	Thr	Pro	Leu	Asn	Gly	Phe	Met	Arg	Glu	Arg	Glu	Tyr	Leu		
		275					280					285					
Gln	Cys	Leu	His	Phe	Asp	Cys	Leu	Leu	Asp	Gly	Gly	Val	Ile	Asn	Leu		
	290					295					300						
Ser	Val	Pro	Ile	Val	Leu	Thr	Ala	Thr	His	Glu	Asp	Lys	Glu	Arg	Leu		
305					310					315					320		
Asp	Gly	Cys	Thr	Ala	Phe	Ala	Leu	Met	Tyr	Glu	Gly	Arg	Arg	Val	Ala		
				325					330					335			
Ile	Leu	Arg	Asn	Pro	Glu	Phe	Phe	Glu	His	Arg	Lys	Glu	Glu	Arg	Cys		
			340					345						350			
Ala	Arg	Gln	Trp	Gly	Thr	Thr	Cys	Lys	Asn	His	Pro	Tyr	Ile	Lys	Met		
		355					360					365					
Val	Met	Glu	Gln	Gly	Asp	Trp	Leu	Ile	Gly	Gly	Asp	Leu	Gln	Val	Leu		
	370					375					380						
Asp	Arg	Val	Tyr	Trp	Asn	Asp	Gly	Leu	Asp	Gln	Tyr	Arg	Leu	Thr	Pro		
385					390					395					400		
Thr	Glu	Leu	Lys	Gln	Lys	Phe	Lys	Asp	Met	Asn	Ala	Asp	Ala	Val	Phe		
			405						410					415			
Ala	Phe	Gln	Leu	Arg	Asn	Pro	Val	His	Asn	Gly	His	Ala	Leu	Leu	Met		
		420						425					430				
Gln	Asp	Thr	His	Lys	Gln	Leu	Leu	Glu	Arg	Gly	Tyr	Arg	Arg	Pro	Val		
	435					440						445					
Leu	Leu	Leu	His	Pro	Leu	Gly	Gly	Trp	Thr	Lys	Asp	Asp	Asp	Val	Pro		
	450					455					460						
Leu	Met	Trp	Arg	Met	Lys	Gln	His	Ala	Ala	Val	Leu	Glu	Glu	Gly	Val		
465					470					475				480			
Leu	Asn	Pro	Glu	Thr	Thr	Val	Val	Ala	Ile	Phe	Pro	Ser	Pro	Met	Met		
			485						490					495			
Tyr	Ala	Gly	Pro	Thr	Glu	Val	Gln	Trp	His	Cys	Arg	Ala	Arg	Met	Val		
		500						505					510				
Ala	Gly	Ala	Asn	Phe	Tyr	Met	Cys	Gly	Arg	Asp	Pro	Ala	Gly	Met	Pro		
	515						520					525					
His	Pro	Glu	Thr	Gly	Lys	Asp	Leu	Tyr	Glu	Pro	Ser	His	Gly	Ala	Lys		
	530					535					540						

Val Leu Thr Met Ala Pro Gly Leu Ile Thr Leu Glu Ile Val Pro Phe
545 550 555 560

Arg Val Ala Ala Tyr Asn Lys Lys Lys Lys Arg Met Asp Tyr Tyr Asp
565 570 575

Ser Glu His His Glu Asp Phe Glu Phe Ile Leu Gly Thr Arg Met Arg
580 585 590

Lys Leu Ala Arg Glu Gly Gln Lys Pro Pro Glu Gly Phe Met Ala Pro
595 600 605

Lys Ala Trp Thr Val Leu Thr Glu Tyr Tyr Lys Ser Leu Glu Lys Ala
610 615 620

<210> 245

<211> 556

<212> PRT

<213> Homo sapiens

<400> 245

Met Ala Arg Thr Thr Ser Gln Leu Tyr Asp Ala Val Pro Ile Gln Ser
1 5 10 15

Ser Val Val Leu Cys Ser Cys Pro Ser Pro Ser Met Val Arg Thr Gln
20 25 30

Thr Glu Ser Ser Thr Pro Pro Gly Ile Pro Gly Gly Ser Arg Gln Gly
35 40 45

Pro Ala Met Asp Gly Thr Ala Ala Glu Pro Arg Pro Gly Ala Gly Ser
50 55 60

Leu Gln His Ala Gln Pro Pro Pro Gln Pro Arg Lys Lys Arg Pro Glu
65 70 75 80

Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly Ser Phe Ser Thr Val
85 90 95

Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu Tyr Ala Ile Lys Ile
100 105 110

Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys Val Pro Tyr Val Thr
115 120 125

Arg Glu Arg Asp Val Met Ser Arg Leu Asp His Pro Phe Phe Val Lys
130 135 140

Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu Tyr Phe Gly Leu Ser
145 150 155 160

Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg Lys Ile Gly Ser
165 170 175

Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu Ile Val Ser Ala
180 185 190

Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg Asp Leu Lys Pro
 195 200 205
 Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln Ile Thr Asp Phe
 210 215 220
 Gly Thr Ala Lys Val Leu Ser Pro Glu Ser Lys Gln Ala Arg Ala Asn
 225 230 235 240
 Ser Phe Val Gly Thr Ala Gln Tyr Val Ser Pro Glu Leu Leu Thr Glu
 245 250 255
 Lys Ser Ala Cys Lys Ser Ser Asp Leu Trp Ala Leu Gly Cys Ile Ile
 260 265 270
 Tyr Gln Leu Val Ala Gly Leu Pro Pro Phe Arg Ala Gly Asn Glu Tyr
 275 280 285
 Leu Ile Phe Gln Lys Ile Ile Lys Leu Glu Tyr Asp Phe Pro Glu Lys
 290 295 300
 Phe Phe Pro Lys Ala Arg Asp Leu Val Glu Lys Leu Leu Val Leu Asp
 305 310 315 320
 Ala Thr Lys Arg Leu Gly Cys Glu Glu Met Glu Gly Tyr Gly Pro Leu
 325 330 335
 Lys Ala His Pro Phe Phe Glu Ser Val Thr Trp Glu Asn Leu His Gln
 340 345 350
 Gln Thr Pro Pro Lys Leu Thr Ala Tyr Leu Pro Ala Met Ser Glu Asp
 355 360 365
 Asp Glu Asp Cys Tyr Gly Asn Tyr Asp Asn Leu Leu Ser Gln Phe Gly
 370 375 380
 Cys Met Gln Val Ser Ser Ser Ser Ser Ser His Ser Leu Ser Ala Ser
 385 390 395 400
 Asp Thr Gly Leu Pro Gln Arg Ser Gly Ser Asn Ile Glu Gln Tyr Ile
 405 410 415
 His Asp Leu Asp Ser Asn Ser Phe Glu Leu Asp Leu Gln Phe Ser Glu
 420 425 430
 Asp Glu Lys Arg Leu Leu Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp
 435 440 445
 His Gln Phe Val Glu Asn Asn Leu Ile Leu Lys Met Gly Pro Val Asp
 450 455 460
 Lys Arg Lys Gly Leu Phe Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu
 465 470 475 480
 Gly Pro His Leu Tyr Tyr Val Asp Pro Val Asn Lys Val Leu Lys Gly
 485 490 495

Glu Ile Pro Trp Ser Gln Glu Leu Arg Pro Glu Ala Lys Asn Phe Lys
500 505 510

Thr Phe Phe Val His Thr Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro
515 520 525

Ser Gly Asn Ala His Lys Trp Cys Arg Lys Ile Gln Glu Val Trp Arg
530 535 540

Gln Arg Tyr Gln Ser His Pro Asp Ala Ala Val Gln
545 550 555

<210> 246

<211> 479

<212> PRT

<213> Homo sapiens

<400> 246

Met Ser Asp Val Thr Ile Val Lys Glu Gly Trp Val Gln Lys Arg Gly
1 5 10 15

Glu Tyr Ile Lys Asn Trp Arg Pro Arg Tyr Phe Leu Leu Lys Thr Asp
20 25 30

Gly Ser Phe Ile Gly Tyr Lys Glu Lys Pro Gln Asp Val Asp Leu Pro
35 40 45

Tyr Pro Leu Asn Asn Phe Ser Val Ala Lys Cys Gln Leu Met Lys Thr
50 55 60

Glu Arg Pro Lys Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp Thr
65 70 75 80

Thr Val Ile Glu Arg Thr Phe His Val Asp Thr Pro Glu Glu Arg Glu
85 90 95

Glu Trp Thr Glu Ala Ile Gln Ala Val Ala Asp Arg Leu Gln Arg Gln
100 105 110

Glu Glu Glu Arg Met Asn Cys Ser Pro Thr Ser Gln Ile Asp Asn Ile
115 120 125

Gly Glu Glu Glu Met Asp Ala Ser Thr Thr His His Lys Arg Lys Thr
130 135 140

Met Asn Asp Phe Asp Tyr Leu Lys Leu Leu Gly Lys Gly Thr Phe Gly
145 150 155 160

Lys Val Ile Leu Val Arg Glu Lys Ala Ser Gly Lys Tyr Tyr Ala Met
165 170 175

Lys Ile Leu Lys Lys Glu Val Ile Ile Ala Lys Asp Glu Val Ala His
180 185 190

Thr Leu Thr Glu Ser Arg Val Leu Lys Asn Thr Arg His Pro Phe Leu

195					200					205					
Thr	Ser	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	Lys	Asp	Arg	Leu	Cys	Phe	Val
210						215					220				
Met	Glu	Tyr	Val	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser	Arg	Glu
225					230					235					240
Arg	Val	Phe	Ser	Glu	Asp	Arg	Thr	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	Val
				245					250					255	
Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Gly	Lys	Ile	Val	Tyr	Arg	Asp	Leu
			260					265					270		
Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Thr
		275					280					285			
Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Ile	Thr	Asp	Ala	Ala	Thr	Met	Lys
	290					295					300				
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu	Glu	Asp
305					310					315					320
Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	Val	Val	Met
				325					330					335	
Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	Asp	His	Glu
			340					345					350		
Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Asp	Ile	Lys	Phe	Pro	Arg	Thr
	355						360					365			
Leu	Ser	Ser	Asp	Ala	Lys	Ser	Leu	Leu	Ser	Gly	Leu	Leu	Ile	Lys	Asp
	370					375					380				
Pro	Asn	Lys	Arg	Leu	Gly	Gly	Gly	Pro	Asp	Asp	Ala	Lys	Glu	Ile	Met
385					390					395					400
Arg	His	Ser	Phe	Phe	Ser	Gly	Val	Asn	Trp	Gln	Asp	Val	Tyr	Asp	Lys
				405					410					415	
Lys	Leu	Val	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	Ser	Glu	Thr	Asp	Thr
			420					425					430		
Arg	Tyr	Phe	Asp	Glu	Glu	Phe	Thr	Ala	Gln	Thr	Ile	Thr	Ile	Thr	Pro
	435						440					445			
Pro	Glu	Lys	Tyr	Asp	Glu	Asp	Gly	Met	Asp	Cys	Met	Asp	Asn	Glu	Arg
	450					455					460				
Arg	Pro	His	Phe	Pro	Gln	Phe	Ser	Tyr	Ser	Ala	Ser	Gly	Arg	Glu	
465					470					475					

<210> 247

<211> 479

<212> PRT

<213> Homo sapiens

<400> 247

Met	Ser	Asp	Val	Thr	Ile	Val	Lys	Glu	Gly	Trp	Val	Gln	Lys	Arg	Gly	
1				5					10					15		
Glu	Tyr	Ile	Lys	Asn	Trp	Arg	Pro	Arg	Tyr	Phe	Leu	Leu	Lys	Thr	Asp	
			20					25					30			
Gly	Ser	Phe	Ile	Gly	Tyr	Lys	Glu	Lys	Pro	Gln	Asp	Val	Asp	Leu	Pro	
		35					40					45				
Tyr	Pro	Leu	Asn	Asn	Phe	Ser	Val	Ala	Lys	Cys	Gln	Leu	Met	Lys	Thr	
	50					55					60					
Glu	Arg	Pro	Lys	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp	Thr	
65					70					75					80	
Thr	Val	Ile	Glu	Arg	Thr	Phe	His	Val	Asp	Thr	Pro	Glu	Glu	Arg	Glu	
				85					90					95		
Glu	Trp	Thr	Glu	Ala	Ile	Gln	Ala	Val	Ala	Asp	Arg	Leu	Gln	Arg	Gln	
			100					105					110			
Glu	Glu	Glu	Arg	Met	Asn	Cys	Ser	Pro	Thr	Ser	Gln	Ile	Asp	Asn	Ile	
		115					120					125				
Gly	Glu	Glu	Glu	Met	Asp	Ala	Ser	Thr	Thr	His	His	Lys	Arg	Lys	Thr	
	130					135					140					
Met	Asn	Asp	Phe	Asp	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	Phe	Gly	
145					150					155					160	
Lys	Val	Ile	Leu	Val	Arg	Glu	Lys	Ala	Ser	Gly	Lys	Tyr	Tyr	Ala	Met	
				165					170					175		
Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Ile	Ala	Lys	Asp	Glu	Val	Ala	His	
			180					185					190			
Thr	Leu	Thr	Glu	Ser	Arg	Val	Leu	Lys	Asn	Thr	Arg	His	Pro	Phe	Leu	
		195					200					205				
Thr	Ser	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	Lys	Asp	Arg	Leu	Cys	Phe	Val	
	210					215					220					
Met	Glu	Tyr	Val	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser	Arg	Glu	
225					230					235					240	
Arg	Val	Phe	Ser	Glu	Asp	Arg	Thr	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	Val	
				245					250					255		
Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Gly	Lys	Ile	Val	Tyr	Arg	Asp	Leu	
			260					265					270			
Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Thr	
		275					280					285				

Asp Phe Gly Leu Cys Lys Glu Gly Ile Thr Asp Ala Ala Thr Met Lys
290 295 300

Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Glu Asp
305 310 315 320

Asn Asp Tyr Gly Arg Ala Val Asp Trp Trp Gly Leu Gly Val Val Met
325 330 335

Tyr Glu Met Met Cys Gly Arg Leu Pro Phe Tyr Asn Gln Asp His Glu
340 345 350

Lys Leu Phe Glu Leu Ile Leu Met Glu Asp Ile Lys Phe Pro Arg Thr
355 360 365

Leu Ser Ser Asp Ala Lys Ser Leu Leu Ser Gly Leu Leu Ile Lys Asp
370 375 380

Pro Asn Lys Arg Leu Gly Gly Gly Pro Asp Asp Ala Lys Glu Ile Met
385 390 395 400

Arg His Ser Phe Phe Ser Gly Val Asn Trp Gln Asp Val Tyr Asp Lys
405 410 415

Lys Leu Val Pro Pro Phe Lys Pro Gln Val Thr Ser Glu Thr Asp Thr
420 425 430

Arg Tyr Phe Asp Glu Glu Phe Thr Ala Gln Thr Ile Thr Ile Thr Pro
435 440 445

Pro Glu Lys Tyr Asp Glu Asp Gly Met Asp Cys Met Asp Asn Glu Arg
450 455 460

Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Gly Arg Glu
465 470 475

<210> 248
<211> 479
<212> PRT
<213> Homo sapiens

<400> 248

Met Ser Asp Val Thr Ile Val Lys Glu Gly Trp Val Gln Lys Arg Gly
1 5 10 15

Glu Tyr Ile Lys Asn Trp Arg Pro Arg Tyr Phe Leu Leu Lys Thr Asp
20 25 30

Gly Ser Phe Ile Gly Tyr Lys Glu Lys Pro Gln Asp Val Asp Leu Pro
35 40 45

Tyr Pro Leu Asn Asn Phe Ser Val Ala Lys Cys Gln Leu Met Lys Thr
50 55 60

Glu Arg Pro Lys Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp Thr
65 70 75 80

Thr	Val	Ile	Glu	Arg	Thr	Phe	His	Val	Asp	Thr	Pro	Glu	Glu	Arg	Glu		
				85					90					95			
Glu	Trp	Thr	Glu	Ala	Ile	Gln	Ala	Val	Ala	Asp	Arg	Leu	Gln	Arg	Gln		
			100					105					110				
Glu	Glu	Glu	Arg	Met	Asn	Cys	Ser	Pro	Thr	Ser	Gln	Ile	Asp	Asn	Ile		
			115				120					125					
Gly	Glu	Glu	Glu	Met	Asp	Ala	Ser	Thr	Thr	His	His	Lys	Arg	Lys	Thr		
	130					135					140						
Met	Asn	Asp	Phe	Asp	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	Phe	Gly		
145					150					155					160		
Lys	Val	Ile	Leu	Val	Arg	Glu	Lys	Ala	Ser	Gly	Lys	Tyr	Tyr	Ala	Met		
				165					170					175			
Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Ile	Ala	Lys	Asp	Glu	Val	Ala	His		
			180					185					190				
Thr	Leu	Thr	Glu	Ser	Arg	Val	Leu	Lys	Asn	Thr	Arg	His	Pro	Phe	Leu		
	195						200					205					
Thr	Ser	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	Lys	Asp	Arg	Leu	Cys	Phe	Val		
	210					215					220						
Met	Glu	Tyr	Val	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser	Arg	Glu		
225					230					235					240		
Arg	Val	Phe	Ser	Glu	Asp	Arg	Thr	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	Val		
				245					250					255			
Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Gly	Lys	Ile	Val	Tyr	Arg	Asp	Leu		
			260					265					270				
Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Thr		
		275					280					285					
Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Ile	Thr	Asp	Ala	Ala	Thr	Met	Lys		
	290					295					300						
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu	Glu	Asp		
305					310					315					320		
Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	Val	Val	Met		
				325					330					335			
Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	Asp	His	Glu		
			340					345					350				
Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Asp	Ile	Lys	Phe	Pro	Arg	Thr		
		355					360					365					
Leu	Ser	Ser	Asp	Ala	Lys	Ser	Leu	Leu	Ser	Gly	Leu	Leu	Ile	Lys	Asp		
	370					375					380						

Pro Asn Lys Arg Leu Gly Gly Gly Pro Asp Asp Ala Lys Glu Ile Met
385 390 395 400

Arg His Ser Phe Phe Ser Gly Val Asn Trp Gln Asp Val Tyr Asp Lys
405 410 415

Lys Leu Val Pro Pro Phe Lys Pro Gln Val Thr Ser Glu Thr Asp Thr
420 425 430

Arg Tyr Phe Asp Glu Glu Phe Thr Ala Gln Thr Ile Thr Ile Thr Pro
435 440 445

Pro Glu Lys Tyr Asp Glu Asp Gly Met Asp Cys Met Asp Asn Glu Arg
450 455 460

Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Gly Arg Glu
465 470 475

<210> 249

<211> 685

<212> PRT

<213> Homo sapiens

<400> 249

Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys
1 5 10 15

Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Gly Asp Ser Lys Lys
20 25 30

Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln
35 40 45

Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His
50 55 60

Ser Gly Pro Glu Ile Ser Arg Ile Ile Val Asp Pro Thr Thr Gly Lys
65 70 75 80

Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys
85 90 95

Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile
100 105 110

Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Ile Asp
115 120 125

Lys Glu Ile Glu Leu His Arg Ile Leu His His Lys His Val Val Gln
130 135 140

Phe Tyr His Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu
145 150 155 160

Tyr Cys Ser Arg Arg Ser Met Ala His Ile Leu Lys Ala Arg Lys Val

165								170					175		
Leu	Thr	Glu	Pro	Glu	Val	Arg	Tyr	Tyr	Leu	Arg	Gln	Ile	Val	Ser	Gly
			180				185						190		
Leu	Lys	Tyr	Leu	His	Glu	Gln	Glu	Ile	Leu	His	Arg	Asp	Leu	Lys	Leu
			195				200						205		
Gly	Asn	Phe	Phe	Ile	Asn	Glu	Ala	Met	Glu	Leu	Lys	Val	Gly	Asp	Phe
			210				215						220		
Gly	Leu	Ala	Ala	Arg	Leu	Glu	Pro	Leu	Glu	His	Arg	Arg	Arg	Thr	Ile
			225				230						235	240	
Cys	Gly	Thr	Pro	Asn	Tyr	Leu	Ser	Pro	Glu	Val	Leu	Asn	Lys	Gln	Gly
			245				250						255		
His	Gly	Cys	Glu	Ser	Asp	Ile	Trp	Ala	Leu	Gly	Cys	Val	Met	Tyr	Thr
			260				265						270		
Met	Leu	Leu	Gly	Arg	Pro	Pro	Phe	Glu	Thr	Thr	Asn	Leu	Lys	Glu	Thr
			275				280						285		
Tyr	Arg	Cys	Ile	Arg	Glu	Ala	Arg	Tyr	Thr	Met	Pro	Ser	Ser	Leu	Leu
			290				295						300		
Ala	Pro	Ala	Lys	His	Leu	Ile	Ala	Ser	Met	Leu	Ser	Lys	Asn	Pro	Glu
			305				310						315	320	
Asp	Arg	Pro	Ser	Leu	Asp	Asp	Ile	Ile	Arg	His	Asp	Phe	Phe	Leu	Gln
			325				330						335		
Gly	Phe	Thr	Pro	Asp	Arg	Leu	Ser	Ser	Ser	Cys	Cys	His	Thr	Val	Pro
			340				345						350		
Asp	Phe	His	Leu	Ser	Ser	Pro	Ala	Lys	Asn	Phe	Phe	Lys	Lys	Ala	Ala
			355				360						365		
Ala	Ala	Leu	Phe	Gly	Gly	Lys	Lys	Asp	Lys	Ala	Arg	Tyr	Ile	Asp	Thr
			370				375						380		
His	Asn	Arg	Val	Ser	Lys	Glu	Asp	Glu	Asp	Ile	Tyr	Lys	Leu	Arg	His
			385				390						395	400	
Asp	Leu	Lys	Lys	Thr	Ser	Ile	Thr	Gln	Gln	Pro	Ser	Lys	His	Arg	Thr
			405				410						415		
Asp	Glu	Glu	Leu	Gln	Pro	Pro	Thr	Thr	Thr	Val	Ala	Arg	Ser	Gly	Thr
			420				425						430		
Pro	Ala	Val	Glu	Asn	Lys	Gln	Gln	Ile	Gly	Asp	Ala	Ile	Arg	Met	Ile
			435				440						445		
Val	Arg	Gly	Thr	Leu	Gly	Ser	Cys	Ser	Ser	Ser	Ser	Glu	Cys	Leu	Glu
			450				455						460		
Asp	Ser	Thr	Met	Gly	Ser	Val	Ala	Asp	Thr	Val	Ala	Arg	Val	Leu	Arg

465		470		475		480
Gly Cys Leu Glu Asn Met Pro Glu Ala Asp Cys Ile Pro Lys Glu Gln						
	485			490		495
Leu Ser Thr Ser Phe Gln Trp Val Thr Lys Trp Val Asp Tyr Ser Asn						
	500			505		510
Lys Tyr Gly Phe Gly Tyr Gln Leu Ser Asp His Thr Val Gly Val Leu						
	515			520		525
Phe Asn Asn Gly Ala His Met Ser Leu Leu Pro Asp Lys Lys Thr Val						
	530			535		540
His Tyr Tyr Ala Glu Leu Gly Gln Cys Ser Val Phe Pro Ala Thr Asp						
545		550		555		560
Ala Pro Glu Gln Phe Ile Ser Gln Val Thr Val Leu Lys Tyr Phe Ser						
	565			570		575
His Tyr Met Glu Glu Asn Leu Met Asp Gly Gly Asp Leu Pro Ser Val						
	580			585		590
Thr Asp Ile Arg Arg Pro Arg Leu Tyr Leu Leu Gln Trp Leu Lys Ser						
	595			600		605
Asp Lys Ala Leu Met Met Leu Phe Asn Asp Gly Thr Phe Gln Val Asn						
	610			615		620
Phe Tyr His Asp His Thr Lys Ile Ile Ile Cys Ser Gln Asn Glu Glu						
625		630		635		640
Tyr Leu Leu Thr Tyr Ile Asn Glu Asp Arg Ile Ser Thr Thr Phe Arg						
	645			650		655
Leu Thr Thr Leu Leu Met Ser Gly Cys Ser Ser Glu Leu Lys Asn Arg						
	660			665		670
Met Glu Tyr Ala Leu Asn Met Leu Leu Gln Arg Cys Asn						
	675			680		685

<210> 250
 <211> 685
 <212> PRT
 <213> Homo sapiens

<400> 250

Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys						
1	5			10		15
Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Gly Asp Ser Lys Lys						
	20			25		30
Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln						
	35			40		45

Ala 50	Gln	Val	Pro	Pro	Ala 55	Pro	His	His	His	His 60	His	His	Ser	His	
Ser 65	Gly	Pro	Glu	Ile	Ser 70	Arg	Ile	Ile	Val	Asp 75	Pro	Thr	Thr	Gly 80	
Arg	Tyr	Cys	Arg	Gly 85	Lys	Val	Leu	Gly	Lys 90	Gly	Gly	Phe	Ala	Lys 95	
Tyr	Glu	Met	Thr 100	Asp	Leu	Thr	Asn	Asn 105	Lys	Val	Tyr	Ala	Ala 110	Lys	Ile
Ile	Pro	His 115	Ser	Arg	Val	Ala	Lys 120	Pro	His	Gln	Arg	Glu 125	Lys	Ile	Asp
Lys	Glu 130	Ile	Glu	Leu	His	Arg 135	Ile	Leu	His	His	Lys 140	His	Val	Val	Gln
Phe 145	Tyr	His	Tyr	Phe	Glu 150	Asp	Lys	Glu	Asn	Ile 155	Tyr	Ile	Leu	Leu	Glu 160
Tyr	Cys	Ser	Arg	Arg 165	Ser	Met	Ala	His	Ile 170	Leu	Lys	Ala	Arg	Lys 175	Val
Leu	Thr	Glu	Pro 180	Glu	Val	Arg	Tyr	Tyr 185	Leu	Arg	Gln	Ile	Val 190	Ser	Gly
Leu	Lys 195	Tyr	Leu	His	Glu	Gln 200	Glu	Ile	Leu	His	Arg 205	Asp	Leu	Lys	Leu
Gly 210	Asn	Phe	Phe	Ile	Asn	Glu 215	Ala	Met	Glu	Leu	Lys 220	Val	Gly	Asp	Phe
Gly 225	Leu	Ala	Ala	Arg	Leu 230	Glu	Pro	Leu	Glu	His 235	Arg	Arg	Arg	Thr	Ile 240
Cys	Gly	Thr	Pro	Asn 245	Tyr	Leu	Ser	Pro	Glu 250	Val	Leu	Asn	Lys	Gln 255	Gly
His	Gly	Cys	Glu 260	Ser	Asp	Ile	Trp 265	Ala	Leu	Gly	Cys	Val 270	Met	Tyr	Thr
Met	Leu 275	Leu	Gly	Arg	Pro	Pro	Phe 280	Glu	Thr	Thr	Asn 285	Leu	Lys	Glu	Thr
Tyr	Arg 290	Cys	Ile	Arg	Glu	Ala 295	Arg	Tyr	Thr	Met	Pro 300	Ser	Ser	Leu	Leu
Ala 305	Pro	Ala	Lys	His	Leu 310	Ile	Ala	Ser	Met	Leu 315	Ser	Lys	Asn	Pro	Glu 320
Asp	Arg	Pro	Ser	Leu 325	Asp	Asp	Ile	Ile	Arg 330	His	Asp	Phe	Phe	Leu 335	Gln
Gly	Phe	Thr	Pro 340	Asp	Arg	Leu	Ser	Ser 345	Ser	Cys	Cys	His 350	Thr	Val	Pro

Asp	Phe	His	Leu	Ser	Ser	Pro	Ala	Lys	Asn	Phe	Phe	Lys	Lys	Ala	Ala	
		355					360					365				
Ala	Ala	Leu	Phe	Gly	Gly	Lys	Lys	Asp	Lys	Ala	Arg	Tyr	Ile	Asp	Thr	
		370				375					380					
His	Asn	Arg	Val	Ser	Lys	Glu	Asp	Glu	Asp	Ile	Tyr	Lys	Leu	Arg	His	
385					390					395					400	
Asp	Leu	Lys	Lys	Thr	Ser	Ile	Thr	Gln	Gln	Pro	Ser	Lys	His	Arg	Thr	
				405					410					415		
Asp	Glu	Glu	Leu	Gln	Pro	Pro	Thr	Thr	Thr	Val	Ala	Arg	Ser	Gly	Thr	
			420					425						430		
Pro	Ala	Val	Glu	Asn	Lys	Gln	Gln	Ile	Gly	Asp	Ala	Ile	Arg	Met	Ile	
		435					440					445				
Val	Arg	Gly	Thr	Leu	Gly	Ser	Cys	Ser	Ser	Ser	Ser	Glu	Cys	Leu	Glu	
	450					455						460				
Asp	Ser	Thr	Met	Gly	Ser	Val	Ala	Asp	Thr	Val	Ala	Arg	Val	Leu	Arg	
465					470					475					480	
Gly	Cys	Leu	Glu	Asn	Met	Pro	Glu	Ala	Asp	Cys	Ile	Pro	Lys	Glu	Gln	
				485					490					495		
Leu	Ser	Thr	Ser	Phe	Gln	Trp	Val	Thr	Lys	Trp	Val	Asp	Tyr	Ser	Asn	
			500					505					510			
Lys	Tyr	Gly	Phe	Gly	Tyr	Gln	Leu	Ser	Asp	His	Thr	Val	Gly	Val	Leu	
		515				520						525				
Phe	Asn	Asn	Gly	Ala	His	Met	Ser	Leu	Leu	Pro	Asp	Lys	Lys	Thr	Val	
	530					535					540					
His	Tyr	Tyr	Ala	Glu	Leu	Gly	Gln	Cys	Ser	Val	Phe	Pro	Ala	Thr	Asp	
545					550					555					560	
Ala	Pro	Glu	Gln	Phe	Ile	Ser	Gln	Val	Thr	Val	Leu	Lys	Tyr	Phe	Ser	
				565					570					575		
His	Tyr	Met	Glu	Glu	Asn	Leu	Met	Asp	Gly	Gly	Asp	Leu	Pro	Ser	Val	
			580					585					590			
Thr	Asp	Ile	Arg	Arg	Pro	Arg	Leu	Tyr	Leu	Leu	Gln	Trp	Leu	Lys	Ser	
		595					600					605				
Asp	Lys	Ala	Leu	Met	Met	Leu	Phe	Asn	Asp	Gly	Thr	Phe	Gln	Val	Asn	
	610					615					620					
Phe	Tyr	His	Asp	His	Thr	Lys	Ile	Ile	Ile	Cys	Ser	Gln	Asn	Glu	Glu	
625					630					635					640	
Tyr	Leu	Leu	Thr	Tyr	Ile	Asn	Glu	Asp	Arg	Ile	Ser	Thr	Thr	Phe	Arg	
				645					650					655		

Leu Thr Thr Leu Leu Met Ser Gly Cys Ser Ser Glu Leu Lys Asn Arg
660 665 670

Met Glu Tyr Ala Leu Asn Met Leu Leu Gln Arg Cys Asn
675 680 685

<210> 251
<211> 685
<212> PRT
<213> Homo sapiens

<400> 251

Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys
1 5 10 15

Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Gly Asp Ser Lys Lys
20 25 30

Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln
35 40 45

Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His
50 55 60

Ser Gly Pro Glu Ile Ser Arg Ile Ile Val Asp Pro Thr Thr Gly Lys
65 70 75 80

Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys
85 90 95

Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile
100 105 110

Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Ile Asp
115 120 125

Lys Glu Ile Glu Leu His Arg Ile Leu His His Lys His Val Val Gln
130 135 140

Phe Tyr His Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu
145 150 155 160

Tyr Cys Ser Arg Arg Ser Met Ala His Ile Leu Lys Ala Arg Lys Val
165 170 175

Leu Thr Glu Pro Glu Val Arg Tyr Tyr Leu Arg Gln Ile Val Ser Gly
180 185 190

Leu Lys Tyr Leu His Glu Gln Glu Ile Leu His Arg Asp Leu Lys Leu
195 200 205

Gly Asn Phe Phe Ile Asn Glu Ala Met Glu Leu Lys Val Gly Asp Phe
210 215 220

Gly Leu Ala Ala Arg Leu Glu Pro Leu Glu His Arg Arg Arg Thr Ile
225 230 235 240

Cys	Gly	Thr	Pro	Asn	Tyr	Leu	Ser	Pro	Glu	Val	Leu	Asn	Lys	Gln	Gly	245	250	255
His	Gly	Cys	Glu	Ser	Asp	Ile	Trp	Ala	Leu	Gly	Cys	Val	Met	Tyr	Thr	260	265	270
Met	Leu	Leu	Gly	Arg	Pro	Pro	Phe	Glu	Thr	Thr	Asn	Leu	Lys	Glu	Thr	275	280	285
Tyr	Arg	Cys	Ile	Arg	Glu	Ala	Arg	Tyr	Thr	Met	Pro	Ser	Ser	Leu	Leu	290	295	300
Ala	Pro	Ala	Lys	His	Leu	Ile	Ala	Ser	Met	Leu	Ser	Lys	Asn	Pro	Glu	305	310	315
Asp	Arg	Pro	Ser	Leu	Asp	Asp	Ile	Ile	Arg	His	Asp	Phe	Phe	Leu	Gln	325	330	335
Gly	Phe	Thr	Pro	Asp	Arg	Leu	Ser	Ser	Ser	Cys	Cys	His	Thr	Val	Pro	340	345	350
Asp	Phe	His	Leu	Ser	Ser	Pro	Ala	Lys	Asn	Phe	Phe	Lys	Lys	Ala	Ala	355	360	365
Ala	Ala	Leu	Phe	Gly	Gly	Lys	Lys	Asp	Lys	Ala	Arg	Tyr	Ile	Asp	Thr	370	375	380
His	Asn	Arg	Val	Ser	Lys	Glu	Asp	Glu	Asp	Ile	Tyr	Lys	Leu	Arg	His	385	390	395
Asp	Leu	Lys	Lys	Thr	Ser	Ile	Thr	Gln	Gln	Pro	Ser	Lys	His	Arg	Thr	405	410	415
Asp	Glu	Glu	Leu	Gln	Pro	Pro	Thr	Thr	Thr	Val	Ala	Arg	Ser	Gly	Thr	420	425	430
Pro	Ala	Val	Glu	Asn	Lys	Gln	Gln	Ile	Gly	Asp	Ala	Ile	Arg	Met	Ile	435	440	445
Val	Arg	Gly	Thr	Leu	Gly	Ser	Cys	Ser	Ser	Ser	Ser	Glu	Cys	Leu	Glu	450	455	460
Asp	Ser	Thr	Met	Gly	Ser	Val	Ala	Asp	Thr	Val	Ala	Arg	Val	Leu	Arg	465	470	475
Gly	Cys	Leu	Glu	Asn	Met	Pro	Glu	Ala	Asp	Cys	Ile	Pro	Lys	Glu	Gln	485	490	495
Leu	Ser	Thr	Ser	Phe	Gln	Trp	Val	Thr	Lys	Trp	Val	Asp	Tyr	Ser	Asn	500	505	510
Lys	Tyr	Gly	Phe	Gly	Tyr	Gln	Leu	Ser	Asp	His	Thr	Val	Gly	Val	Leu	515	520	525
Phe	Asn	Asn	Gly	Ala	His	Met	Ser	Leu	Leu	Pro	Asp	Lys	Lys	Thr	Val	530	535	540

His Tyr Tyr Ala Glu Leu Gly Gln Cys Ser Val Phe Pro Ala Thr Asp
545 550 555 560

Ala Pro Glu Gln Phe Ile Ser Gln Val Thr Val Leu Lys Tyr Phe Ser
565 570 575

His Tyr Met Glu Glu Asn Leu Met Asp Gly Gly Asp Leu Pro Ser Val
580 585 590

Thr Asp Ile Arg Arg Pro Arg Leu Tyr Leu Leu Gln Trp Leu Lys Ser
595 600 605

Asp Lys Ala Leu Met Met Leu Phe Asn Asp Gly Thr Phe Gln Val Asn
610 615 620

Phe Tyr His Asp His Thr Lys Ile Ile Ile Cys Ser Gln Asn Glu Glu
625 630 635 640

Tyr Leu Leu Thr Tyr Ile Asn Glu Asp Arg Ile Ser Thr Thr Phe Arg
645 650 655

Leu Thr Thr Leu Leu Met Ser Gly Cys Ser Ser Glu Leu Lys Asn Arg
660 665 670

Met Glu Tyr Ala Leu Asn Met Leu Leu Gln Arg Cys Asn
675 680 685

<210> 252
<211> 305
<212> PRT
<213> Homo sapiens

<400> 252

Met Gly His Ala Leu Cys Val Cys Ser Arg Gly Thr Val Ile Ile Asp
1 5 10 15

Asn Lys Arg Tyr Leu Phe Ile Gln Lys Leu Gly Glu Gly Gly Phe Ser
20 25 30

Tyr Val Asp Leu Val Glu Gly Leu His Asp Gly His Phe Tyr Ala Leu
35 40 45

Lys Arg Ile Leu Cys His Glu Gln Gln Asp Arg Glu Glu Ala Gln Arg
50 55 60

Glu Ala Asp Met His Arg Leu Phe Asn His Pro Asn Ile Leu Arg Leu
65 70 75 80

Val Ala Tyr Cys Leu Arg Glu Arg Gly Ala Lys His Glu Ala Trp Leu
85 90 95

Leu Leu Pro Phe Phe Lys Arg Gly Thr Leu Trp Asn Glu Ile Glu Arg
100 105 110

Leu Lys Asp Lys Gly Asn Phe Leu Thr Glu Asp Gln Ile Leu Trp Leu

115					120					125					
Leu	Leu	Gly	Ile	Cys	Arg	Gly	Leu	Glu	Ala	Ile	His	Ala	Lys	Gly	Tyr
130						135					140				
Ala	His	Arg	Asp	Leu	Lys	Pro	Thr	Asn	Ile	Leu	Leu	Gly	Asp	Glu	Gly
145					150					155					160
Gln	Pro	Val	Leu	Met	Asp	Leu	Gly	Ser	Met	Asn	Gln	Ala	Cys	Ile	His
				165					170					175	
Val	Glu	Gly	Ser	Arg	Gln	Ala	Leu	Thr	Leu	Gln	Asp	Trp	Ala	Ala	Gln
			180					185					190		
Arg	Cys	Thr	Ile	Ser	Tyr	Arg	Ala	Pro	Glu	Leu	Phe	Ser	Val	Gln	Ser
		195					200					205			
His	Cys	Val	Ile	Asp	Glu	Arg	Thr	Asp	Val	Trp	Ser	Phe	Gly	Cys	Val
		210					215					220			
Leu	Tyr	Ala	Met	Met	Phe	Gly	Glu	Gly	Pro	Tyr	Asp	Met	Val	Phe	Gln
225						230					235				240
Lys	Gly	Asp	Ser	Val	Ala	Leu	Ala	Val	Gln	Asn	Gln	Leu	Ser	Ile	Pro
				245					250					255	
Gln	Ser	Pro	Arg	His	Ser	Ser	Ala	Leu	Arg	Gln	Leu	Leu	Asn	Ser	Met
			260					265					270		
Met	Thr	Val	Asp	Pro	His	Gln	Arg	Pro	His	Ile	Pro	Leu	Leu	Leu	Ser
		275					280					285			
Gln	Leu	Glu	Ala	Leu	Gln	Pro	Pro	Ala	Pro	Gly	Gln	His	Thr	Thr	Gln
		290					295					300			

Ile
305

<210> 253
 <211> 1115
 <212> PRT
 <213> Homo sapiens

<400> 253

Met	Glu	Arg	Ala	Ile	Ser	Pro	Gly	Leu	Leu	Val	Arg	Ala	Leu	Leu	Leu
1				5					10					15	
Leu	Leu	Leu	Leu	Gly	Leu	Ala	Ala	Arg	Thr	Val	Ala	Ala	Gly	Arg	Ala
			20					25					30		
Arg	Gly	Leu	Pro	Ala	Pro	Thr	Ala	Glu	Ala	Ala	Phe	Gly	Leu	Gly	Ala
		35					40					45			
Ala	Ala	Ala	Pro	Thr	Ser	Ala	Thr	Arg	Val	Pro	Ala	Ala	Gly	Ala	Val
		50				55					60				

Ala	Ala	Ala	Glu	Val	Thr	Val	Glu	Asp	Ala	Glu	Ala	Leu	Pro	Ala	Ala	
65					70					75					80	
Ala	Gly	Glu	Gln	Glu	Pro	Arg	Gly	Pro	Glu	Pro	Asp	Asp	Glu	Thr	Glu	
			85						90					95		
Leu	Arg	Pro	Arg	Gly	Arg	Ser	Leu	Val	Ile	Ile	Ser	Thr	Leu	Asp	Gly	
		100						105					110			
Arg	Ile	Ala	Ala	Leu	Asp	Pro	Glu	Asn	His	Gly	Lys	Lys	Gln	Trp	Asp	
		115					120					125				
Leu	Asp	Val	Gly	Ser	Gly	Ser	Leu	Val	Ser	Ser	Ser	Leu	Ser	Lys	Pro	
	130					135					140					
Glu	Val	Phe	Gly	Asn	Lys	Met	Ile	Ile	Pro	Ser	Leu	Asp	Gly	Ala	Leu	
145					150					155					160	
Phe	Gln	Trp	Asp	Arg	Asp	Arg	Glu	Ser	Met	Glu	Thr	Val	Pro	Phe	Thr	
			165						170					175		
Val	Glu	Ser	Leu	Leu	Glu	Ser	Ser	Tyr	Lys	Phe	Gly	Asp	Asp	Val	Val	
			180					185					190			
Leu	Val	Gly	Gly	Lys	Ser	Leu	Thr	Thr	Tyr	Gly	Leu	Ser	Ala	Tyr	Ser	
		195					200					205				
Gly	Lys	Val	Arg	Tyr	Ile	Cys	Ser	Ala	Leu	Gly	Cys	Arg	Gln	Trp	Asp	
	210					215					220					
Ser	Asp	Glu	Met	Glu	Gln	Glu	Glu	Asp	Ile	Leu	Leu	Leu	Gln	Arg	Thr	
225					230					235					240	
Gln	Lys	Thr	Val	Arg	Ala	Val	Gly	Pro	Arg	Ser	Gly	Asn	Glu	Lys	Trp	
			245						250					255		
Asn	Phe	Ser	Val	Gly	His	Phe	Glu	Leu	Arg	Tyr	Ile	Pro	Asp	Met	Glu	
			260					265					270			
Thr	Arg	Ala	Gly	Phe	Ile	Glu	Ser	Thr	Phe	Lys	Pro	Asn	Glu	Asn	Thr	
		275					280					285				
Glu	Glu	Ser	Lys	Ile	Ile	Ser	Asp	Val	Glu	Glu	Gln	Glu	Ala	Ala	Ile	
	290					295					300					
Met	Asp	Ile	Val	Ile	Lys	Val	Ser	Val	Ala	Asp	Trp	Lys	Val	Met	Ala	
305					310					315				320		
Phe	Ser	Lys	Lys	Gly	Gly	His	Leu	Glu	Trp	Glu	Tyr	Gln	Phe	Cys	Thr	
			325						330					335		
Pro	Ile	Ala	Ser	Ala	Trp	Leu	Leu	Lys	Asp	Gly	Lys	Val	Ile	Pro	Ile	
			340					345					350			
Ser	Leu	Phe	Asp	Asp	Thr	Ser	Tyr	Thr	Ser	Asn	Asp	Asp	Val	Leu	Glu	
		355					360					365				

Asp Glu Glu Asp Ile Val Glu Ala Ala Arg Gly Ala Thr Glu Asn Ser
 370 375 380
 Val Tyr Leu Gly Met Tyr Arg Gly Gln Leu Tyr Leu Gln Ser Ser Val
 385 390 395 400
 Arg Ile Ser Glu Lys Phe Pro Ser Ser Pro Lys Ala Leu Glu Ser Val
 405 410 415
 Thr Asn Glu Asn Ala Ile Ile Pro Leu Pro Thr Ile Lys Trp Lys Pro
 420 425 430
 Leu Ile His Ser Pro Ser Arg Thr Pro Val Leu Val Gly Ser Asp Glu
 435 440 445
 Phe Asp Lys Cys Leu Ser Asn Asp Lys Phe Ser His Glu Glu Tyr Ser
 450 455 460
 Asn Gly Ala Leu Ser Ile Leu Gln Tyr Pro Tyr Asp Asn Gly Tyr Tyr
 465 470 475 480
 Leu Pro Tyr Tyr Lys Arg Glu Arg Asn Lys Arg Ser Thr Gln Ile Thr
 485 490 495
 Val Arg Phe Leu Asp Asn Pro His Tyr Asn Lys Asn Ile Arg Lys Lys
 500 505 510
 Asp Pro Val Leu Leu Leu His Trp Trp Lys Glu Ile Val Ala Thr Ile
 515 520 525
 Leu Phe Cys Ile Ile Ala Thr Thr Phe Ile Val Arg Arg Leu Phe His
 530 535 540
 Pro His Pro His Arg Gln Arg Lys Glu Ser Glu Thr Gln Cys Gln Thr
 545 550 555 560
 Glu Asn Lys Tyr Asp Ser Val Ser Gly Glu Ala Asn Asp Ser Ser Trp
 565 570 575
 Asn Asp Ile Lys Asn Ser Gly Tyr Ile Ser Arg Tyr Leu Thr Asp Phe
 580 585 590
 Glu Pro Ile Gln Cys Leu Gly Arg Gly Gly Phe Gly Val Val Phe Glu
 595 600 605
 Ala Lys Asn Lys Val Asp Asp Cys Asn Tyr Ala Ile Lys Arg Ile Arg
 610 615 620
 Leu Pro Asn Arg Glu Leu Ala Arg Glu Lys Val Met Arg Glu Val Lys
 625 630 635 640
 Ala Leu Ala Lys Leu Glu His Pro Gly Ile Val Arg Tyr Phe Asn Ala
 645 650 655
 Trp Leu Glu Ala Pro Pro Glu Lys Trp Gln Glu Lys Met Asp Glu Ile
 660 665 670

Trp	Leu	Lys	Asp	Glu	Ser	Thr	Asp	Trp	Pro	Leu	Ser	Ser	Pro	Ser	Pro	675	680	685	
Met	Asp	Ala	Pro	Ser	Val	Lys	Ile	Arg	Arg	Met	Asp	Pro	Phe	Ser	Thr	690	695	700	
Lys	Glu	His	Ile	Glu	Ile	Ile	Ala	Pro	Ser	Pro	Gln	Arg	Ser	Arg	Ser	705	710	715	720
Phe	Ser	Val	Gly	Ile	Ser	Cys	Asp	Gln	Thr	Ser	Ser	Ser	Glu	Ser	Gln	725	730	735	
Phe	Ser	Pro	Leu	Glu	Phe	Ser	Gly	Met	Asp	His	Glu	Asp	Ile	Ser	Glu	740	745	750	
Ser	Val	Asp	Ala	Ala	Tyr	Asn	Leu	Gln	Asp	Ser	Cys	Leu	Thr	Asp	Cys	755	760	765	
Asp	Val	Glu	Asp	Gly	Thr	Met	Asp	Gly	Asn	Asp	Glu	Gly	His	Ser	Phe	770	775	780	
Glu	Leu	Cys	Pro	Ser	Glu	Ala	Ser	Pro	Tyr	Val	Arg	Ser	Arg	Glu	Arg	785	790	795	800
Thr	Ser	Ser	Ser	Ile	Val	Phe	Glu	Asp	Ser	Gly	Cys	Asp	Asn	Ala	Ser	805	810	815	
Ser	Lys	Glu	Glu	Pro	Lys	Thr	Asn	Arg	Leu	His	Ile	Gly	Asn	His	Cys	820	825	830	
Ala	Asn	Lys	Leu	Thr	Ala	Phe	Lys	Pro	Thr	Ser	Ser	Lys	Ser	Ser	Ser	835	840	845	
Glu	Ala	Thr	Leu	Ser	Ile	Ser	Pro	Pro	Arg	Pro	Thr	Thr	Leu	Ser	Leu	850	855	860	
Asp	Leu	Thr	Lys	Asn	Thr	Thr	Glu	Lys	Leu	Gln	Pro	Ser	Ser	Pro	Lys	865	870	875	880
Val	Tyr	Leu	Tyr	Ile	Gln	Met	Gln	Leu	Cys	Arg	Lys	Glu	Asn	Leu	Lys	885	890	895	
Asp	Trp	Met	Asn	Gly	Arg	Cys	Thr	Ile	Glu	Glu	Arg	Glu	Arg	Ser	Val	900	905	910	
Cys	Leu	His	Ile	Phe	Leu	Gln	Ile	Ala	Glu	Ala	Val	Glu	Phe	Leu	His	915	920	925	
Ser	Lys	Gly	Leu	Met	His	Arg	Asp	Leu	Lys	Pro	Ser	Asn	Ile	Phe	Phe	930	935	940	
Thr	Met	Asp	Asp	Val	Val	Lys	Val	Gly	Asp	Phe	Gly	Leu	Val	Thr	Ala	945	950	955	960
Met	Asp	Gln	Asp	Glu	Glu	Glu	Gln	Thr	Val	Leu	Thr	Pro	Met	Pro	Ala	965	970	975	

Tyr Ala Arg His Thr Gly Gln Val Gly Thr Lys Leu Tyr Met Ser Pro
 980 985 990

Glu Gln Ile His Gly Asn Ser Tyr Ser His Lys Val Asp Ile Phe Ser
 995 1000 1005

Leu Gly Leu Ile Leu Phe Glu Leu Leu Tyr Pro Phe Ser Thr Gln
 1010 1015 1020

Met Glu Arg Val Arg Thr Leu Thr Asp Val Arg Asn Leu Lys Phe
 1025 1030 1035

Pro Pro Leu Phe Thr Gln Lys Tyr Pro Cys Glu Tyr Val Met Val
 1040 1045 1050

Gln Asp Met Leu Ser Pro Ser Pro Met Glu Arg Pro Glu Ala Ile
 1055 1060 1065

Asn Ile Ile Glu Asn Ala Val Phe Glu Asp Leu Asp Phe Pro Gly
 1070 1075 1080

Lys Thr Val Leu Arg Gln Arg Ser Arg Ser Leu Ser Ser Ser Gly
 1085 1090 1095

Thr Lys His Ser Arg Gln Ser Asn Asn Ser His Ser Pro Leu Pro
 1100 1105 1110

Ser Asn
 1115

<210> 254
 <211> 743
 <212> PRT
 <213> Homo sapiens

<400> 254

Met Gly Ser Arg Ala Gln Lys Ser Ala Gly Asn Ala Glu Leu Trp Glu
 1 5 10 15

Pro Leu Pro Glu Gly Arg Pro Arg Pro Ala Gly Thr Ser Ser Ala Val
 20 25 30

Ser Ala Trp Ala Ser Leu Lys Leu Cys Leu Arg Gly Gly Ser Gly Arg
 35 40 45

Arg Gln Arg Leu Gly Gly Gly Arg Met Gln Pro Glu Glu Gly His Arg
 50 55 60

Leu Ala Ala Gly Ala Ala Val Arg Gly Ala Ala Ala Thr Val Leu Leu
 65 70 75 80

Arg Leu Arg Asp Asp Leu Asn Val Thr Arg Leu Ser His Phe Glu Tyr
 85 90 95

Val Lys Asn Glu Asp Leu Glu Lys Ile Gly Met Gly Arg Pro Gly Gln
 100 105 110

Arg	Arg	Leu	Trp	Glu	Ala	Val	Lys	Arg	Arg	Lys	Ala	Leu	Cys	Lys	Arg	115	120	125	
Lys	Ser	Trp	Met	Asn	Lys	Val	Phe	Ser	Gly	Lys	Arg	Leu	Glu	Ala	Glu	130	135	140	
Phe	Pro	Pro	His	His	Ser	Gln	Ser	Thr	Phe	Arg	Lys	Thr	Ser	Pro	Ala	145	150	155	160
Pro	Gly	Gly	Pro	Ala	Gly	Glu	Gly	Pro	Leu	Gln	Ser	Leu	Thr	Cys	Leu	165	170	175	
Ile	Gly	Glu	Lys	Asp	Leu	Arg	Leu	Leu	Glu	Lys	Leu	Gly	Asp	Gly	Ser	180	185	190	
Phe	Gly	Val	Val	Arg	Arg	Gly	Glu	Trp	Asp	Ala	Pro	Ser	Gly	Lys	Thr	195	200	205	
Val	Ser	Pro	Pro	Gln	Pro	Ala	Phe	Phe	Thr	Gln	Lys	Pro	Thr	Tyr	Asp	210	215	220	
Pro	Val	Ser	Glu	Asp	Gln	Asp	Pro	Leu	Ser	Ser	Asp	Phe	Lys	Arg	Leu	225	230	235	240
Gly	Leu	Arg	Lys	Pro	Gly	Leu	Pro	Arg	Gly	Leu	Trp	Leu	Ala	Lys	Pro	245	250	255	
Ser	Ala	Arg	Val	Pro	Gly	Thr	Lys	Ala	Ser	Arg	Gly	Ser	Gly	Ala	Glu	260	265	270	
Val	Thr	Leu	Ile	Asp	Phe	Gly	Glu	Glu	Pro	Val	Val	Pro	Ala	Leu	Arg	275	280	285	
Pro	Cys	Ala	Pro	Ser	Leu	Ala	Gln	Leu	Ala	Met	Asp	Ala	Cys	Ser	Leu	290	295	300	
Leu	Asp	Glu	Thr	Pro	Pro	Gln	Ser	Pro	Thr	Arg	Ala	Leu	Pro	Arg	Pro	305	310	315	320
Leu	His	Pro	Thr	Pro	Val	Val	Asp	Trp	Asp	Ala	Arg	Pro	Leu	Pro	Pro	325	330	335	
Pro	Pro	Ala	Tyr	Asp	Asp	Val	Ala	Gln	Asp	Glu	Asp	Asp	Phe	Glu	Ile	340	345	350	
Cys	Ser	Ile	Asn	Ser	Thr	Leu	Val	Gly	Ala	Gly	Val	Pro	Ala	Gly	Pro	355	360	365	
Ser	Gln	Gly	Gln	Thr	Asn	Tyr	Ala	Phe	Val	Pro	Glu	Gln	Ala	Arg	Pro	370	375	380	
Pro	Pro	Pro	Leu	Glu	Asp	Asn	Leu	Phe	Leu	Pro	Pro	Gln	Gly	Gly	Gly	385	390	395	400
Lys	Pro	Pro	Ser	Ser	Ala	Gln	Thr	Ala	Glu	Ile	Phe	Gln	Ala	Leu	Gln	405	410	415	

Gln	Glu	Cys	Met	Arg	Gln	Leu	Gln	Ala	Pro	Ala	Gly	Ser	Pro	Ala	Pro	420	425	430
Ser	Pro	Ser	Pro	Gly	Gly	Asp	Asp	Lys	Pro	Gln	Val	Pro	Pro	Arg	Val	435	440	445
Pro	Ile	Pro	Pro	Arg	Pro	Thr	Arg	Pro	His	Val	Gln	Leu	Ser	Pro	Ala	450	455	460
Pro	Pro	Gly	Glu	Glu	Glu	Thr	Ser	Gln	Trp	Pro	Gly	Pro	Ala	Ser	Pro	465	470	475 480
Pro	Arg	Val	Pro	Pro	Arg	Glu	Pro	Leu	Ser	Pro	Gln	Gly	Ser	Arg	Thr	485	490	495
Pro	Ser	Pro	Leu	Val	Pro	Pro	Gly	Ser	Ser	Pro	Leu	Pro	Pro	Arg	Leu	500	505	510
Ser	Ser	Ser	Pro	Gly	Lys	Thr	Met	Pro	Thr	Thr	Gln	Ser	Phe	Ala	Ser	515	520	525
Asp	Pro	Lys	Tyr	Ala	Thr	Pro	Gln	Val	Ile	Gln	Ala	Pro	Gly	Pro	Arg	530	535	540
Ala	Gly	Pro	Cys	Ile	Leu	Pro	Ile	Val	Arg	Asp	Gly	Lys	Lys	Val	Ser	545	550	555 560
Ser	Thr	His	Tyr	Tyr	Leu	Leu	Pro	Glu	Arg	Pro	Ser	Tyr	Leu	Glu	Arg	565	570	575
Tyr	Gln	Arg	Phe	Leu	Arg	Glu	Ala	Gln	Ser	Pro	Glu	Glu	Pro	Thr	Pro	580	585	590
Leu	Pro	Val	Pro	Leu	Leu	Leu	Pro	Pro	Pro	Ser	Thr	Pro	Ala	Pro	Ala	595	600	605
Ala	Pro	Thr	Ala	Thr	Val	Arg	Pro	Met	Pro	Gln	Ala	Ala	Leu	Asp	Pro	610	615	620
Lys	Ala	Asn	Phe	Ser	Thr	Asn	Asn	Ser	Asn	Pro	Gly	Ala	Arg	Pro	Pro	625	630	635 640
Pro	Pro	Arg	Ala	Thr	Ala	Arg	Leu	Pro	Gln	Arg	Gly	Cys	Pro	Gly	Asp	645	650	655
Gly	Pro	Glu	Ala	Gly	Arg	Pro	Ala	Asp	Lys	Ile	Gln	Met	Ala	Met	Val	660	665	670
His	Gly	Val	Thr	Thr	Glu	Glu	Cys	Gln	Ala	Ala	Leu	Gln	Cys	His	Gly	675	680	685
Trp	Ser	Val	Gln	Arg	Ala	Cys	Pro	Val	Ser	Glu	Gly	Gly	Ala	Ala	Leu	690	695	700
Arg	Ala	Gly	Ser	Ala	Ala	Gln	Arg	Glu	Cys	His	Lys	Val	Leu	Glu	Met	705	710	715 720

Phe Asp Trp Asn Leu Glu Gln Ala Gly Cys His Leu Leu Gly Ser Trp
725 730 735

Gly Pro Ala His His Lys Arg
740

<210> 255
<211> 1036
<212> PRT
<213> Homo sapiens

<400> 255

Met Gln Pro Glu Glu Gly Thr Gly Trp Leu Leu Glu Leu Leu Ser Glu
1 5 10 15

Val Gln Leu Gln Gln Tyr Phe Leu Arg Leu Arg Asp Asp Leu Asn Val
20 25 30

Thr Arg Leu Ser His Phe Glu Tyr Val Lys Asn Glu Asp Leu Glu Lys
35 40 45

Ile Gly Met Gly Arg Pro Gly Gln Arg Arg Leu Trp Glu Ala Val Lys
50 55 60

Arg Arg Lys Ala Leu Cys Lys Arg Lys Ser Trp Met Ser Lys Val Phe
65 70 75 80

Ser Gly Lys Arg Leu Glu Ala Glu Phe Pro Pro His His Ser Gln Ser
85 90 95

Thr Phe Arg Lys Thr Ser Pro Ala Pro Gly Gly Pro Ala Gly Glu Gly
100 105 110

Pro Leu Gln Ser Leu Thr Cys Leu Ile Gly Glu Lys Asp Leu Arg Leu
115 120 125

Leu Glu Lys Leu Gly Asp Gly Ser Phe Gly Val Val Arg Arg Gly Glu
130 135 140

Trp Asp Ala Pro Ser Gly Lys Thr Val Ser Val Ala Val Lys Cys Leu
145 150 155 160

Lys Pro Asp Val Leu Ser Gln Pro Glu Ala Met Asp Asp Phe Ile Arg
165 170 175

Glu Val Asn Ala Met His Ser Leu Asp His Arg Asn Leu Ile Arg Leu
180 185 190

Tyr Gly Val Val Leu Thr Pro Pro Met Lys Met Val Thr Glu Leu Ala
195 200 205

Pro Leu Gly Ser Leu Leu Asp Arg Leu Arg Lys His Gln Gly His Phe
210 215 220

Leu Leu Gly Thr Leu Ser Arg Tyr Ala Val Gln Val Ala Glu Gly Met

225		230		235		240
Gly Tyr Leu Glu Ser Lys Arg Phe Ile His Arg Asp Leu Ala Ala Arg						
		245		250		255
Asn Leu Leu Leu Ala Thr Arg Asp Leu Val Lys Ile Gly Asp Phe Gly						
		260		265		270
Leu Met Arg Ala Leu Pro Gln Asn Asp Asp His Tyr Val Met Gln Glu						
		275		280		285
His Arg Lys Val Pro Phe Ala Trp Cys Ala Pro Glu Ser Leu Lys Thr						
		290		295		300
Arg Thr Phe Ser His Ala Ser Asp Thr Trp Met Phe Gly Val Thr Leu						
305		310		315		320
Trp Glu Met Phe Thr Tyr Gly Gln Glu Pro Trp Ile Gly Leu Asn Gly						
		325		330		335
Ser Gln Ile Leu His Lys Ile Asp Lys Glu Gly Glu Arg Leu Pro Arg						
		340		345		350
Pro Glu Asp Cys Pro Gln Asp Ile Tyr Asn Val Met Val Gln Cys Trp						
		355		360		365
Ala His Lys Pro Glu Asp Arg Pro Thr Phe Val Ala Leu Arg Asp Phe						
		370		375		380
Leu Leu Glu Ala Gln Pro Thr Asp Met Arg Ala Leu Gln Asp Phe Glu						
385		390		395		400
Glu Pro Asp Lys Leu His Ile Gln Met Asn Asp Val Ile Thr Val Ile						
		405		410		415
Glu Gly Arg Ala Glu Asn Tyr Trp Trp Arg Gly Gln Asn Thr Arg Thr						
		420		425		430
Leu Cys Val Gly Pro Phe Pro Arg Asn Val Val Thr Ser Val Ala Gly						
		435		440		445
Leu Ser Ala Gln Asp Ile Ser Gln Pro Leu Gln Asn Ser Phe Ile His						
		450		455		460
Thr Gly His Gly Asp Ser Asp Pro Arg His Cys Trp Gly Phe Pro Asp						
465		470		475		480
Arg Ile Asp Glu Leu Tyr Leu Gly Asn Pro Met Asp Pro Pro Asp Leu						
		485		490		495
Leu Ser Val Glu Leu Ser Thr Ser Arg Pro Pro Gln His Leu Gly Gly						
		500		505		510
Val Lys Lys Pro Thr Tyr Asp Pro Val Ser Glu Asp Gln Asp Pro Leu						
		515		520		525
Ser Ser Asp Phe Lys Arg Leu Gly Leu Arg Lys Pro Gly Leu Pro Arg						

530	535	540
Gly Leu Trp Leu Ala Lys Pro Ser Ala Arg Val Pro Gly Thr Lys Ala 545 550 555 560		
Ser Arg Gly Ser Gly Ala Glu Val Thr Leu Ile Asp Phe Gly Glu Glu 565 570 575		
Pro Val Val Pro Ala Leu Arg Pro Cys Pro Pro Ser Leu Ala Gln Leu 580 585 590		
Ala Met Asp Ala Cys Ser Leu Leu Asp Glu Thr Pro Pro Gln Ser Pro 595 600 605		
Thr Arg Ala Leu Pro Arg Pro Leu His Pro Thr Pro Val Val Asp Trp 610 615 620		
Asp Ala Arg Pro Leu Pro Pro Pro Pro Ala Tyr Asp Asp Val Ala Gln 625 630 635 640		
Asp Glu Asp Asp Phe Glu Ile Cys Ser Ile Asn Ser Thr Leu Val Gly 645 650 655		
Ala Gly Val Pro Ala Gly Pro Ser Gln Gly Gln Thr Asn Tyr Ala Phe 660 665 670		
Val Pro Glu Gln Ala Arg Pro Pro Pro Pro Leu Glu Asp Asn Leu Phe 675 680 685		
Leu Pro Pro Gln Gly Gly Gly Lys Pro Pro Ser Ser Ala Gln Thr Ala 690 695 700		
Glu Ile Phe Gln Ala Leu Gln Gln Glu Cys Met Arg Gln Leu Gln Ala 705 710 715 720		
Pro Gly Ser Pro Ala Pro Ser Pro Ser Pro Gly Gly Asp Asp Lys Pro 725 730 735		
Gln Val Pro Pro Arg Val Pro Ile Pro Pro Arg Pro Thr Arg Pro His 740 745 750		
Val Gln Leu Ser Pro Ala Pro Pro Gly Glu Glu Glu Thr Ser Gln Trp 755 760 765		
Pro Gly Pro Ala Ser Pro Pro Arg Val Pro Pro Arg Glu Pro Leu Ser 770 775 780		
Pro Gln Gly Ser Arg Thr Pro Ser Pro Leu Val Pro Pro Gly Ser Ser 785 790 795 800		
Pro Leu Pro Pro Arg Leu Ser Ser Ser Pro Gly Lys Thr Met Pro Thr 805 810 815		
Thr Gln Ser Phe Ala Ser Asp Pro Lys Tyr Ala Thr Pro Gln Val Ile 820 825 830		
Gln Ala Pro Gly Ala Gly Gly Pro Cys Ile Leu Pro Ile Val Arg Asp		

835	840	845
Gly Lys Lys Val Ser Ser Thr His Tyr Tyr Leu Leu Pro Glu Arg Pro		
850	855	860
Ser Tyr Leu Glu Arg Tyr Gln Arg Phe Leu Arg Glu Ala Gln Ser Pro		
865	870	875 880
Glu Glu Pro Thr Pro Leu Pro Val Pro Leu Leu Leu Pro Pro Pro Ser		
	885	890 895
Thr Pro Ala Pro Ala Ala Pro Thr Ala Thr Val Arg Pro Met Pro Gln		
	900	905 910
Ala Ala Leu Asp Pro Lys Ala Asn Phe Ser Thr Asn Asn Ser Asn Pro		
	915	920 925
Gly Ala Arg Pro Pro Pro Pro Arg Ala Thr Ala Arg Leu Pro Gln Arg		
	930	935 940
Gly Cys Pro Gly Asp Gly Pro Glu Ala Gly Arg Pro Ala Asp Lys Ile		
945	950	955 960
Gln Met Ala Met Val His Gly Val Thr Thr Glu Glu Cys Gln Ala Ala		
	965	970 975
Leu Gln Cys His Gly Trp Ser Val Gln Arg Ala Ala Gln Tyr Leu Lys		
	980	985 990
Val Glu Gln Leu Phe Gly Leu Gly Leu Arg Pro Arg Gly Glu Cys His		
	995	1000 1005
Lys Val Leu Glu Met Phe Asp Trp Asn Leu Glu Gln Ala Gly Cys		
1010	1015	1020
His Leu Leu Gly Ser Trp Gly Pro Ala His His Lys Arg		
1025	1030	1035
<210> 256		
<211> 1036		
<212> PRT		
<213> Homo sapiens		
<400> 256		
Met Gln Pro Glu Glu Gly Thr Gly Trp Leu Leu Glu Leu Leu Ser Glu		
1	5	10 15
Val Gln Leu Gln Gln Tyr Phe Leu Arg Leu Arg Asp Asp Leu Asn Val		
	20	25 30
Thr Arg Leu Ser His Phe Glu Tyr Val Lys Asn Glu Asp Leu Glu Lys		
	35	40 45
Ile Gly Met Gly Arg Pro Gly Gln Arg Arg Leu Trp Glu Ala Val Lys		
50	55	60

Arg	Arg	Lys	Ala	Leu	Cys	Lys	Arg	Lys	Ser	Trp	Met	Ser	Lys	Val	Phe	65	70	75	80
Ser	Gly	Lys	Arg	Leu	Glu	Ala	Glu	Phe	Pro	Pro	His	His	Ser	Gln	Ser	85	90		95
Thr	Phe	Arg	Lys	Thr	Ser	Pro	Ala	Pro	Gly	Gly	Pro	Ala	Gly	Glu	Gly	100	105		110
Pro	Leu	Gln	Ser	Leu	Thr	Cys	Leu	Ile	Gly	Glu	Lys	Asp	Leu	Arg	Leu	115	120		125
Leu	Glu	Lys	Leu	Gly	Asp	Gly	Ser	Phe	Gly	Val	Val	Arg	Arg	Gly	Glu	130	135		140
Trp	Asp	Ala	Pro	Ser	Gly	Lys	Thr	Val	Ser	Val	Ala	Val	Lys	Cys	Leu	145	150		155
Lys	Pro	Asp	Val	Leu	Ser	Gln	Pro	Glu	Ala	Met	Asp	Asp	Phe	Ile	Arg	165	170		175
Glu	Val	Asn	Ala	Met	His	Ser	Leu	Asp	His	Arg	Asn	Leu	Ile	Arg	Leu	180	185		190
Tyr	Gly	Val	Val	Leu	Thr	Pro	Pro	Met	Lys	Met	Val	Thr	Glu	Leu	Ala	195	200		205
Pro	Leu	Gly	Ser	Leu	Leu	Asp	Arg	Leu	Arg	Lys	His	Gln	Gly	His	Phe	210	215		220
Leu	Leu	Gly	Thr	Leu	Ser	Arg	Tyr	Ala	Val	Gln	Val	Ala	Glu	Gly	Met	225	230		235
Gly	Tyr	Leu	Glu	Ser	Lys	Arg	Phe	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	245	250		255
Asn	Leu	Leu	Leu	Ala	Thr	Arg	Asp	Leu	Val	Lys	Ile	Gly	Asp	Phe	Gly	260	265		270
Leu	Met	Arg	Ala	Leu	Pro	Gln	Asn	Asp	Asp	His	Tyr	Val	Met	Gln	Glu	275	280		285
His	Arg	Lys	Val	Pro	Phe	Ala	Trp	Cys	Ala	Pro	Glu	Ser	Leu	Lys	Thr	290	295		300
Arg	Thr	Phe	Ser	His	Ala	Ser	Asp	Thr	Trp	Met	Phe	Gly	Val	Thr	Leu	305	310		315
Trp	Glu	Met	Phe	Thr	Tyr	Gly	Gln	Glu	Pro	Trp	Ile	Gly	Leu	Asn	Gly	325	330		335
Ser	Gln	Ile	Leu	His	Lys	Ile	Asp	Lys	Glu	Gly	Glu	Arg	Leu	Pro	Arg	340	345		350
Pro	Glu	Asp	Cys	Pro	Gln	Asp	Ile	Tyr	Asn	Val	Met	Val	Gln	Cys	Trp	355	360		365

Ala	His	Lys	Pro	Glu	Asp	Arg	Pro	Thr	Phe	Val	Ala	Leu	Arg	Asp	Phe	370	375	380	
Leu	Leu	Glu	Ala	Gln	Pro	Thr	Asp	Met	Arg	Ala	Leu	Gln	Asp	Phe	Glu	385	390	395	400
Glu	Pro	Asp	Lys	Leu	His	Ile	Gln	Met	Asn	Asp	Val	Ile	Thr	Val	Ile	405	410	415	
Glu	Gly	Arg	Ala	Glu	Asn	Tyr	Trp	Trp	Arg	Gly	Gln	Asn	Thr	Arg	Thr	420	425	430	
Leu	Cys	Val	Gly	Pro	Phe	Pro	Arg	Asn	Val	Val	Thr	Ser	Val	Ala	Gly	435	440	445	
Leu	Ser	Ala	Gln	Asp	Ile	Ser	Gln	Pro	Leu	Gln	Asn	Ser	Phe	Ile	His	450	455	460	
Thr	Gly	His	Gly	Asp	Ser	Asp	Pro	Arg	His	Cys	Trp	Gly	Phe	Pro	Asp	465	470	475	480
Arg	Ile	Asp	Glu	Leu	Tyr	Leu	Gly	Asn	Pro	Met	Asp	Pro	Pro	Asp	Leu	485	490	495	
Leu	Ser	Val	Glu	Leu	Ser	Thr	Ser	Arg	Pro	Pro	Gln	His	Leu	Gly	Gly	500	505	510	
Val	Lys	Lys	Pro	Thr	Tyr	Asp	Pro	Val	Ser	Glu	Asp	Gln	Asp	Pro	Leu	515	520	525	
Ser	Ser	Asp	Phe	Lys	Arg	Leu	Gly	Leu	Arg	Lys	Pro	Gly	Leu	Pro	Arg	530	535	540	
Gly	Leu	Trp	Leu	Ala	Lys	Pro	Ser	Ala	Arg	Val	Pro	Gly	Thr	Lys	Ala	545	550	555	560
Ser	Arg	Gly	Ser	Gly	Ala	Glu	Val	Thr	Leu	Ile	Asp	Phe	Gly	Glu	Glu	565	570	575	
Pro	Val	Val	Pro	Ala	Leu	Arg	Pro	Cys	Pro	Pro	Ser	Leu	Ala	Gln	Leu	580	585	590	
Ala	Met	Asp	Ala	Cys	Ser	Leu	Leu	Asp	Glu	Thr	Pro	Pro	Gln	Ser	Pro	595	600	605	
Thr	Arg	Ala	Leu	Pro	Arg	Pro	Leu	His	Pro	Thr	Pro	Val	Val	Asp	Trp	610	615	620	
Asp	Ala	Arg	Pro	Leu	Pro	Pro	Pro	Pro	Ala	Tyr	Asp	Asp	Val	Ala	Gln	625	630	635	640
Asp	Glu	Asp	Asp	Phe	Glu	Ile	Cys	Ser	Ile	Asn	Ser	Thr	Leu	Val	Gly	645	650	655	
Ala	Gly	Val	Pro	Ala	Gly	Pro	Ser	Gln	Gly	Gln	Thr	Asn	Tyr	Ala	Phe	660	665	670	

Val	Pro	Glu	Gln	Ala	Arg	Pro	Pro	Pro	Pro	Leu	Glu	Asp	Asn	Leu	Phe	675	680	685	
Leu	Pro	Pro	Gln	Gly	Gly	Gly	Lys	Pro	Pro	Ser	Ser	Ala	Gln	Thr	Ala	690	695	700	
Glu	Ile	Phe	Gln	Ala	Leu	Gln	Gln	Glu	Cys	Met	Arg	Gln	Leu	Gln	Ala	705	710	715	720
Pro	Gly	Ser	Pro	Ala	Pro	Ser	Pro	Ser	Pro	Gly	Gly	Asp	Asp	Lys	Pro	725	730	735	
Gln	Val	Pro	Pro	Arg	Val	Pro	Ile	Pro	Pro	Arg	Pro	Thr	Arg	Pro	His	740	745	750	
Val	Gln	Leu	Ser	Pro	Ala	Pro	Pro	Gly	Glu	Glu	Glu	Thr	Ser	Gln	Trp	755	760	765	
Pro	Gly	Pro	Ala	Ser	Pro	Pro	Arg	Val	Pro	Pro	Arg	Glu	Pro	Leu	Ser	770	775	780	
Pro	Gln	Gly	Ser	Arg	Thr	Pro	Ser	Pro	Leu	Val	Pro	Pro	Gly	Ser	Ser	785	790	795	800
Pro	Leu	Pro	Pro	Arg	Leu	Ser	Ser	Ser	Pro	Gly	Lys	Thr	Met	Pro	Thr	805	810	815	
Thr	Gln	Ser	Phe	Ala	Ser	Asp	Pro	Lys	Tyr	Ala	Thr	Pro	Gln	Val	Ile	820	825	830	
Gln	Ala	Pro	Gly	Ala	Gly	Gly	Pro	Cys	Ile	Leu	Pro	Ile	Val	Arg	Asp	835	840	845	
Gly	Lys	Lys	Val	Ser	Ser	Thr	His	Tyr	Tyr	Leu	Leu	Pro	Glu	Arg	Pro	850	855	860	
Ser	Tyr	Leu	Glu	Arg	Tyr	Gln	Arg	Phe	Leu	Arg	Glu	Ala	Gln	Ser	Pro	865	870	875	880
Glu	Glu	Pro	Thr	Pro	Leu	Pro	Val	Pro	Leu	Leu	Leu	Pro	Pro	Pro	Ser	885	890	895	
Thr	Pro	Ala	Pro	Ala	Ala	Pro	Thr	Ala	Thr	Val	Arg	Pro	Met	Pro	Gln	900	905	910	
Ala	Ala	Leu	Asp	Pro	Lys	Ala	Asn	Phe	Ser	Thr	Asn	Asn	Ser	Asn	Pro	915	920	925	
Gly	Ala	Arg	Pro	Pro	Pro	Pro	Arg	Ala	Thr	Ala	Arg	Leu	Pro	Gln	Arg	930	935	940	
Gly	Cys	Pro	Gly	Asp	Gly	Pro	Glu	Ala	Gly	Arg	Pro	Ala	Asp	Lys	Ile	945	950	955	960
Gln	Met	Ala	Met	Val	His	Gly	Val	Thr	Thr	Glu	Glu	Cys	Gln	Ala	Ala	965	970	975	

Leu Gln Cys His Gly Trp Ser Val Gln Arg Ala Ala Gln Tyr Leu Lys
980 985 990

Val Glu Gln Leu Phe Gly Leu Gly Leu Arg Pro Arg Gly Glu Cys His
995 1000 1005

Lys Val Leu Glu Met Phe Asp Trp Asn Leu Glu Gln Ala Gly Cys
1010 1015 1020

His Leu Leu Gly Ser Trp Gly Pro Ala His His Lys Arg
1025 1030 1035

<210> 257
<211> 424
<212> PRT
<213> Homo sapiens

<400> 257

Met Val Ser Ser Gln Lys Leu Glu Lys Pro Ile Glu Met Gly Ser Ser
1 5 10 15

Glu Pro Leu Pro Ile Ala Asp Gly Asp Arg Arg Arg Lys Lys Lys Arg
20 25 30

Arg Gly Arg Ala Thr Asp Ser Leu Pro Gly Lys Phe Glu Asp Met Tyr
35 40 45

Lys Leu Thr Ser Glu Leu Leu Gly Glu Gly Ala Tyr Ala Lys Val Gln
50 55 60

Gly Ala Val Ser Leu Gln Asn Gly Lys Glu Tyr Ala Val Lys Ile Ile
65 70 75 80

Glu Lys Gln Ala Gly His Ser Arg Ser Arg Val Phe Arg Glu Val Glu
85 90 95

Thr Leu Tyr Gln Cys Gln Gly Asn Lys Asn Ile Leu Glu Leu Ile Glu
100 105 110

Phe Phe Glu Asp Asp Thr Arg Phe Tyr Leu Val Phe Glu Lys Leu Gln
115 120 125

Gly Gly Ser Ile Leu Ala His Ile Gln Lys Gln Lys His Phe Asn Glu
130 135 140

Arg Glu Ala Ser Arg Val Val Arg Asp Val Ala Ala Ala Leu Asp Phe
145 150 155 160

Leu His Thr Lys Gly Ile Ala His Arg Asp Leu Lys Pro Glu Asn Ile
165 170 175

Leu Cys Glu Ser Pro Glu Lys Val Ser Pro Val Lys Ile Cys Asp Phe
180 185 190

Asp Leu Gly Ser Gly Met Lys Leu Asn Asn Ser Cys Thr Pro Ile Thr
195 200 205

Thr	Pro	Glu	Leu	Thr	Thr	Pro	Cys	Gly	Ser	Ala	Glu	Tyr	Met	Ala	Pro
210						215					220				
Glu	Val	Val	Glu	Val	Phe	Thr	Asp	Gln	Ala	Thr	Phe	Tyr	Asp	Lys	Arg
225					230					235					240
Cys	Asp	Leu	Trp	Ser	Leu	Gly	Val	Val	Leu	Tyr	Ile	Met	Leu	Ser	Gly
				245					250					255	
Tyr	Pro	Pro	Phe	Val	Gly	His	Cys	Gly	Ala	Asp	Cys	Gly	Trp	Asp	Arg
			260					265					270		
Gly	Glu	Val	Cys	Arg	Val	Cys	Gln	Asn	Lys	Leu	Phe	Glu	Ser	Ile	Gln
		275					280					285			
Glu	Gly	Lys	Tyr	Glu	Phe	Pro	Asp	Lys	Asp	Trp	Ala	His	Ile	Ser	Ser
	290					295					300				
Glu	Ala	Lys	Asp	Leu	Ile	Ser	Lys	Leu	Leu	Val	Arg	Asp	Ala	Lys	Gln
305					310					315					320
Arg	Leu	Ser	Ala	Ala	Gln	Val	Leu	Gln	His	Pro	Trp	Val	Gln	Gly	Gln
				325					330					335	
Ala	Pro	Glu	Lys	Gly	Leu	Pro	Thr	Pro	Gln	Val	Leu	Gln	Arg	Asn	Ser
			340					345					350		
Ser	Thr	Met	Asp	Leu	Thr	Leu	Phe	Ala	Ala	Glu	Ala	Ile	Ala	Leu	Asn
		355					360					365			
Arg	Gln	Leu	Ser	Gln	His	Glu	Glu	Asn	Glu	Leu	Ala	Glu	Glu	Pro	Glu
		370				375					380				
Ala	Leu	Ala	Asp	Gly	Leu	Cys	Ser	Met	Lys	Leu	Ser	Pro	Pro	Cys	Lys
385					390					395					400
Ser	Arg	Leu	Ala	Arg	Arg	Arg	Ala	Leu	Ala	Gln	Ala	Gly	Arg	Gly	Glu
				405					410					415	
Asp	Arg	Ser	Pro	Pro	Thr	Ala	Leu								
			420												

<210> 258
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 258

Met	Val	Ser	Ser	Gln	Lys	Leu	Glu	Lys	Pro	Ile	Glu	Met	Gly	Ser	Ser
1				5					10					15	
Glu	Pro	Leu	Pro	Ile	Ala	Asp	Gly	Asp	Arg	Arg	Arg	Lys	Lys	Lys	Arg
			20					25					30		
Arg	Gly	Arg	Ala	Thr	Asp	Ser	Leu	Pro	Gly	Lys	Phe	Glu	Asp	Met	Tyr

35					40					45					
Lys	Leu	Thr	Ser	Glu	Leu	Leu	Gly	Glu	Gly	Ala	Tyr	Ala	Lys	Val	Gln
50						55				60					
Gly	Ala	Val	Ser	Leu	Gln	Asn	Gly	Lys	Glu	Tyr	Ala	Val	Lys	Ile	Ile
65					70					75					80
Glu	Lys	Gln	Ala	Gly	His	Ser	Arg	Ser	Arg	Val	Phe	Arg	Glu	Val	Glu
				85					90					95	
Thr	Leu	Tyr	Gln	Cys	Gln	Gly	Asn	Lys	Asn	Ile	Leu	Glu	Leu	Ile	Glu
			100					105					110		
Phe	Phe	Glu	Asp	Asp	Thr	Arg	Phe	Tyr	Leu	Val	Phe	Glu	Lys	Leu	Gln
		115					120					125			
Gly	Gly	Ser	Ile	Leu	Ala	His	Ile	Gln	Lys	Gln	Lys	His	Phe	Asn	Glu
	130					135					140				
Arg	Glu	Ala	Ser	Arg	Val	Val	Arg	Asp	Val	Ala	Ala	Ala	Leu	Asp	Phe
145					150					155					160
Leu	His	Thr	Lys	Gly	Ile	Ala	His	Arg	Asp	Leu	Lys	Pro	Glu	Asn	Ile
				165					170					175	
Leu	Cys	Glu	Ser	Pro	Glu	Lys	Val	Ser	Pro	Val	Lys	Ile	Cys	Asp	Phe
			180					185					190		
Asp	Leu	Gly	Ser	Gly	Met	Lys	Leu	Asn	Asn	Ser	Cys	Thr	Pro	Ile	Thr
	195						200					205			
Thr	Pro	Glu	Leu	Thr	Thr	Pro	Cys	Gly	Ser	Ala	Glu	Tyr	Met	Ala	Pro
	210					215					220				
Glu	Val	Val	Glu	Val	Phe	Thr	Asp	Gln	Ala	Thr	Phe	Tyr	Asp	Lys	Arg
225					230					235					240
Cys	Asp	Leu	Trp	Ser	Leu	Gly	Val	Val	Leu	Tyr	Ile	Met	Leu	Ser	Gly
				245					250					255	
Tyr	Pro	Pro	Phe	Val	Gly	His	Cys	Gly	Ala	Asp	Cys	Gly	Trp	Asp	Arg
			260					265					270		
Gly	Glu	Val	Cys	Arg	Val	Cys	Gln	Asn	Lys	Leu	Phe	Glu	Ser	Ile	Gln
	275						280					285			
Glu	Gly	Lys	Tyr	Glu	Phe	Pro	Asp	Lys	Asp	Trp	Ala	His	Ile	Ser	Ser
	290					295					300				
Glu	Ala	Lys	Asp	Leu	Ile	Ser	Lys	Leu	Leu	Val	Arg	Asp	Ala	Lys	Gln
305					310					315					320
Arg	Leu	Ser	Ala	Ala	Gln	Val	Leu	Gln	His	Pro	Trp	Val	Gln	Gly	Gln
				325					330					335	
Ala	Pro	Glu	Lys	Gly	Leu	Pro	Thr	Pro	Gln	Val	Leu	Gln	Arg	Asn	Ser

340	345	350
Ser Thr Met Asp Leu Thr Leu Phe Ala Ala Glu Ala Ile Ala Leu Asn 355 360 365		
Arg Gln Leu Ser Gln His Glu Glu Asn Glu Leu Ala Glu Glu Pro Glu 370 375 380		
Ala Leu Ala Asp Gly Leu Cys Ser Met Lys Leu Ser Pro Pro Cys Lys 385 390 395 400		
Ser Arg Leu Ala Arg Arg Arg Ala Leu Ala Gln Ala Gly Arg Gly Glu 405 410 415		
Asp Arg Ser Pro Pro Thr Ala Leu 420		

<210> 259
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 259

Met Val Ser Ser Gln Lys Leu Glu Lys Pro Ile Glu Met Gly Ser Ser 1 5 10 15
Glu Pro Leu Pro Ile Ala Asp Gly Asp Arg Arg Arg Lys Lys Lys Arg 20 25 30
Arg Gly Arg Ala Thr Asp Ser Leu Pro Gly Lys Phe Glu Asp Met Tyr 35 40 45
Lys Leu Thr Ser Glu Leu Leu Gly Glu Gly Ala Tyr Ala Lys Val Gln 50 55 60
Gly Ala Val Ser Leu Gln Asn Gly Lys Glu Tyr Ala Val Lys Ile Ile 65 70 75 80
Glu Lys Gln Ala Gly His Ser Arg Ser Arg Val Phe Arg Glu Val Glu 85 90 95
Thr Leu Tyr Gln Cys Gln Gly Asn Lys Asn Ile Leu Glu Leu Ile Glu 100 105 110
Phe Phe Glu Asp Asp Thr Arg Phe Tyr Leu Val Phe Glu Lys Leu Gln 115 120 125
Gly Gly Ser Ile Leu Ala His Ile Gln Lys Gln Lys His Phe Asn Glu 130 135 140
Arg Glu Ala Ser Arg Val Val Arg Asp Val Ala Ala Ala Leu Asp Phe 145 150 155 160
Leu His Thr Lys Gly Ile Ala His Arg Asp Leu Lys Pro Glu Asn Ile 165 170 175

Leu Cys Glu Ser Pro Glu Lys Val Ser Pro Val Lys Ile Cys Asp Phe
 180 185 190
 Asp Leu Gly Ser Gly Met Lys Leu Asn Asn Ser Cys Thr Pro Ile Thr
 195 200 205
 Thr Pro Glu Leu Thr Thr Pro Cys Gly Ser Ala Glu Tyr Met Ala Pro
 210 215 220
 Glu Val Val Glu Val Phe Thr Asp Gln Ala Thr Phe Tyr Asp Lys Arg
 225 230 235 240
 Cys Asp Leu Trp Ser Leu Gly Val Val Leu Tyr Ile Met Leu Ser Gly
 245 250 255
 Tyr Pro Pro Phe Val Gly His Cys Gly Ala Asp Cys Gly Trp Asp Arg
 260 265 270
 Gly Glu Val Cys Arg Val Cys Gln Asn Lys Leu Phe Glu Ser Ile Gln
 275 280 285
 Glu Gly Lys Tyr Glu Phe Pro Asp Lys Asp Trp Ala His Ile Ser Ser
 290 295 300
 Glu Ala Lys Asp Leu Ile Ser Lys Leu Leu Val Arg Asp Ala Lys Gln
 305 310 315 320
 Arg Leu Ser Ala Ala Gln Val Leu Gln His Pro Trp Val Gln Gly Gln
 325 330 335
 Ala Pro Glu Lys Gly Leu Pro Thr Pro Gln Val Leu Gln Arg Asn Ser
 340 345 350
 Ser Thr Met Asp Leu Thr Leu Phe Ala Ala Glu Ala Ile Ala Leu Asn
 355 360 365
 Arg Gln Leu Ser Gln His Glu Glu Asn Glu Leu Ala Glu Glu Pro Glu
 370 375 380
 Ala Leu Ala Asp Gly Leu Cys Ser Met Lys Leu Ser Pro Pro Cys Lys
 385 390 395 400
 Ser Arg Leu Ala Arg Arg Arg Ala Leu Ala Gln Ala Gly Arg Gly Glu
 405 410 415
 Asp Arg Ser Pro Pro Thr Ala Leu
 420

<210> 260

<211> 898

<212> PRT

<213> Homo sapiens

<400> 260

Met Arg Lys Gly Val Leu Lys Asp Pro Glu Ile Ala Asp Leu Phe Tyr
 1 5 10 15

Lys	Asp	Asp	Pro	Glu	Glu	Leu	Phe	Ile	Gly	Leu	His	Glu	Ile	Gly	His	20	25	30	
Gly	Ser	Phe	Gly	Ala	Val	Tyr	Phe	Ala	Thr	Asn	Ala	His	Thr	Ser	Glu	35	40	45	
Val	Val	Ala	Ile	Lys	Lys	Met	Ser	Tyr	Ser	Gly	Lys	Gln	Thr	His	Glu	50	55	60	
Lys	Trp	Gln	Asp	Ile	Leu	Lys	Glu	Val	Lys	Phe	Leu	Arg	Gln	Leu	Lys	65	70	75	80
His	Pro	Asn	Thr	Ile	Glu	Tyr	Lys	Gly	Cys	Tyr	Leu	Lys	Glu	His	Thr	85	90	95	
Ala	Trp	Leu	Val	Met	Glu	Tyr	Cys	Leu	Gly	Ser	Ala	Ser	Asp	Leu	Leu	100	105	110	
Glu	Val	His	Lys	Lys	Pro	Leu	Gln	Glu	Val	Glu	Ile	Ala	Ala	Ile	Thr	115	120	125	
His	Gly	Ala	Leu	His	Gly	Leu	Ala	Tyr	Leu	His	Ser	His	Ala	Leu	Ile	130	135	140	
His	Arg	Asp	Ile	Lys	Ala	Gly	Asn	Ile	Leu	Leu	Thr	Glu	Pro	Gly	Gln	145	150	155	160
Val	Lys	Leu	Ala	Asp	Phe	Gly	Ser	Ala	Ser	Met	Ala	Ser	Pro	Ala	Asn	165	170	175	
Ser	Phe	Val	Gly	Thr	Pro	Tyr	Trp	Met	Ala	Pro	Glu	Val	Ile	Leu	Ala	180	185	190	
Met	Asp	Glu	Gly	Gln	Tyr	Asp	Gly	Lys	Val	Asp	Ile	Trp	Ser	Leu	Gly	195	200	205	
Ile	Thr	Cys	Ile	Glu	Leu	Ala	Glu	Arg	Lys	Pro	Pro	Leu	Phe	Asn	Met	210	215	220	
Asn	Ala	Met	Ser	Ala	Leu	Tyr	His	Ile	Ala	Gln	Asn	Asp	Ser	Pro	Thr	225	230	235	240
Leu	Gln	Ser	Asn	Glu	Trp	Thr	Asp	Ser	Phe	Arg	Arg	Phe	Val	Asp	Tyr	245	250	255	
Cys	Leu	Gln	Lys	Ile	Pro	Gln	Glu	Arg	Pro	Thr	Ser	Ala	Glu	Leu	Leu	260	265	270	
Arg	His	Asp	Phe	Val	Arg	Arg	Asp	Arg	Pro	Leu	Arg	Val	Leu	Ile	Asp	275	280	285	
Leu	Ile	Gln	Arg	Thr	Lys	Asp	Ala	Val	Arg	Glu	Leu	Asp	Asn	Leu	Gln	290	295	300	
Tyr	Arg	Lys	Met	Lys	Lys	Ile	Leu	Phe	Gln	Glu	Thr	Arg	Asn	Gly	Pro	305	310	315	320

Leu Asn Glu Ser Gln Glu Asp Glu Glu Asp Ser Glu His Gly Thr Ser
 325 330 335

Leu Asn Arg Glu Met Asp Ser Leu Gly Ser Asn His Ser Ile Pro Ser
 340 345 350

Met Ser Val Thr Trp Asn Gln Pro Glu Gln Gly Asn Gly Gln Pro Gly
 355 360 365

Gln Gln Pro Phe His Ser Lys His Val Arg Val Met Met His Asp Asp
 370 375 380

Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His
 385 390 395 400

Val Phe Ile Arg Asp Glu Ala Gly His Gly Asp Pro Arg Pro Glu Pro
 405 410 415

Arg Pro Thr Gln Ser Val Gln Ser Gln Ala Leu His Tyr Arg Asn Arg
 420 425 430

Glu Arg Phe Ala Thr Ile Lys Ser Ala Ser Leu Val Thr Arg Gln Ile
 435 440 445

His Glu His Glu Gln Glu Asn Glu Leu Arg Glu Gln Met Ser Gly Tyr
 450 455 460

Lys Arg Met Arg Arg Gln His Gln Lys Gln Leu Ile Ala Leu Glu Asn
 465 470 475 480

Lys Leu Lys Ala Glu Met Asp Glu His Arg Leu Lys Leu Gln Lys Glu
 485 490 495

Val Glu Thr His Ala Asn Asn Ser Ser Ile Glu Leu Glu Lys Leu Ala
 500 505 510

Lys Lys Gln Val Ala Ile Ile Glu Lys Glu Ala Lys Val Ala Ala Ala
 515 520 525

Asp Glu Lys Lys Phe Gln Gln Gln Ile Leu Ala Gln Gln Lys Lys Asp
 530 535 540

Leu Thr Thr Phe Leu Glu Ser Gln Lys Lys Gln Tyr Lys Ile Cys Lys
 545 550 555 560

Glu Lys Ile Lys Glu Glu Met Asn Glu Asp His Ser Thr Pro Lys Lys
 565 570 575

Glu Lys Gln Glu Arg Ile Ser Lys His Lys Glu Asn Leu Gln His Thr
 580 585 590

Gln Ala Glu Glu Glu Ala His Leu Leu Thr Gln Gln Arg Leu Tyr Tyr
 595 600 605

Asp Lys Asn Cys Arg Phe Phe Lys Arg Lys Ile Met Ile Lys Arg His
 610 615 620

Glu Val Glu Gln Gln Asn Ile Arg Glu Glu Leu Asn Lys Lys Arg Thr																	
625					630					635							640
Gln Lys Glu Met Glu His Ala Met Leu Ile Arg His Asp Glu Ser Thr																	
				645					650								655
Arg Glu Leu Glu Tyr Arg Gln Leu His Thr Leu Gln Lys Leu Arg Met																	
				660					665								670
Asp Leu Ile Arg Leu Gln His Gln Thr Glu Leu Glu Asn Gln Leu Glu																	
				675					680								685
Tyr Asn Lys Arg Arg Glu Arg Glu Leu His Arg Lys His Val Met Glu																	
				690					695								700
Leu Arg Gln Gln Pro Lys Asn Leu Lys Ala Met Glu Met Gln Ile Lys																	
				705					710								715
Lys Gln Phe Gln Asp Thr Cys Lys Val Gln Thr Lys Gln Tyr Lys Ala																	
				725					730								735
Leu Lys Asn His Gln Leu Glu Val Thr Pro Lys Asn Glu His Lys Thr																	
				740					745								750
Ile Leu Lys Thr Leu Lys Asp Glu Gln Thr Arg Lys Leu Ala Ile Leu																	
				755					760								765
Ala Glu Gln Tyr Glu Gln Ser Ile Asn Glu Met Met Ala Ser Gln Ala																	
				770					775								780
Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys Gln Ala Leu Arg Leu																	
				785					790								795
Gln Leu Gln Gln Glu Met Glu Leu Leu Asn Ala Tyr Gln Ser Lys Ile																	
				805					810								815
Lys Met Gln Thr Glu Ala Gln His Glu Arg Glu Leu Gln Lys Leu Glu																	
				820					825								830
Gln Arg Val Ser Leu Arg Arg Ala His Leu Glu Gln Lys Ile Glu Glu																	
				835					840								845
Glu Leu Ala Ala Leu Gln Lys Glu Arg Ser Glu Arg Ile Lys Asn Leu																	
				850					855								860
Leu Glu Arg Gln Glu Arg Glu Ile Glu Thr Phe Asp Met Glu Ser Leu																	
				865					870								875
Arg Met Gly Phe Gly Asn Leu Val Thr Leu Asp Phe Pro Lys Glu Asp																	
				885					890								895

Tyr Arg

<210> 261

<211> 749

<212> PRT
<213> Homo sapiens

<400> 261

Met	Glu	Glu	Leu	His	Ser	Leu	Asp	Pro	Arg	Arg	Gln	Glu	Leu	Leu	Glu	
1				5					10					15		
Ala	Arg	Phe	Thr	Gly	Val	Gly	Val	Ser	Lys	Gly	Pro	Leu	Asn	Ser	Glu	
			20					25					30			
Ser	Ser	Asn	Gln	Ser	Leu	Cys	Ser	Val	Gly	Ser	Leu	Ser	Asp	Lys	Glu	
		35					40					45				
Val	Glu	Thr	Pro	Glu	Lys	Lys	Gln	Asn	Asp	Gln	Arg	Asn	Arg	Lys	Arg	
	50					55					60					
Lys	Ala	Glu	Pro	Tyr	Glu	Thr	Ser	Gln	Gly	Lys	Gly	Thr	Pro	Arg	Gly	
65					70					75					80	
His	Lys	Ile	Ser	Asp	Tyr	Phe	Glu	Phe	Ala	Gly	Gly	Ser	Ala	Pro	Gly	
				85					90					95		
Thr	Ser	Pro	Gly	Arg	Ser	Val	Pro	Pro	Val	Ala	Arg	Ser	Ser	Pro	Gln	
			100					105						110		
His	Ser	Leu	Ser	Asn	Pro	Leu	Pro	Arg	Arg	Val	Glu	Gln	Pro	Leu	Tyr	
		115					120					125				
Gly	Leu	Asp	Gly	Ser	Ala	Ala	Lys	Glu	Ala	Thr	Glu	Glu	Gln	Ser	Ala	
	130					135					140					
Leu	Pro	Thr	Leu	Met	Ser	Val	Met	Leu	Ala	Lys	Pro	Arg	Leu	Asp	Thr	
145					150					155					160	
Glu	Gln	Leu	Ala	Gln	Arg	Gly	Ala	Gly	Leu	Cys	Phe	Thr	Phe	Val	Ser	
				165					170					175		
Ala	Gln	Gln	Asn	Ser	Pro	Ser	Ser	Thr	Gly	Ser	Gly	Asn	Thr	Glu	His	
			180					185					190			
Ser	Cys	Ser	Ser	Gln	Lys	Gln	Ile	Ser	Ile	Gln	His	Arg	Arg	Thr	Gln	
		195					200					205				
Ser	Asp	Leu	Thr	Ile	Glu	Lys	Ile	Ser	Ala	Leu	Glu	Asn	Ser	Lys	Asn	
	210					215					220					
Ser	Asp	Leu	Glu	Lys	Lys	Glu	Gly	Arg	Ile	Asp	Asp	Leu	Leu	Arg	Ala	
225					230					235					240	
Asn	Cys	Asp	Leu	Arg	Arg	Gln	Ile	Asp	Glu	Gln	Gln	Lys	Met	Leu	Glu	
				245					250					255		
Lys	Tyr	Lys	Glu	Arg	Leu	Asn	Arg	Cys	Val	Thr	Met	Ser	Lys	Lys	Leu	
			260					265					270			
Leu	Ile	Glu	Lys	Ser	Lys	Gln	Glu	Lys	Met	Ala	Cys	Arg	Asp	Lys	Ser	

275					280					285						
Met	Gln	Asp	Arg	Leu	Arg	Leu	Gly	His	Phe	Thr	Thr	Val	Arg	His	Gly	
290					295					300						
Ala	Ser	Phe	Thr	Glu	Gln	Trp	Thr	Asp	Gly	Tyr	Ala	Phe	Gln	Asn	Leu	
305					310					315					320	
Ile	Lys	Gln	Gln	Glu	Arg	Ile	Asn	Ser	Gln	Arg	Glu	Glu	Ile	Glu	Arg	
325					330					335						
Gln	Arg	Lys	Met	Leu	Ala	Lys	Arg	Lys	Pro	Pro	Ala	Met	Gly	Gln	Ala	
340					345					350						
Pro	Pro	Ala	Thr	Asn	Glu	Gln	Lys	Gln	Arg	Lys	Ser	Lys	Thr	Asn	Gly	
355					360					365						
Ala	Glu	Asn	Glu	Thr	Leu	Thr	Leu	Ala	Glu	Tyr	His	Glu	Gln	Glu	Glu	
370					375					380						
Ile	Phe	Lys	Leu	Arg	Leu	Gly	His	Leu	Lys	Lys	Glu	Glu	Ala	Glu	Ile	
385					390					395					400	
Gln	Ala	Glu	Leu	Glu	Arg	Leu	Glu	Arg	Val	Arg	Asn	Leu	His	Ile	Arg	
405					410					415						
Glu	Leu	Lys	Arg	Ile	His	Asn	Glu	Asp	Asn	Ser	Gln	Phe	Lys	Asp	His	
420					425					430						
Pro	Thr	Leu	Asn	Asp	Arg	Tyr	Leu	Leu	Leu	His	Leu	Leu	Gly	Arg	Gly	
435					440					445						
Gly	Phe	Ser	Glu	Val	Tyr	Lys	Ala	Phe	Asp	Leu	Thr	Glu	Gln	Arg	Tyr	
450					455					460						
Val	Ala	Val	Lys	Ile	His	Gln	Leu	Asn	Lys	Asn	Trp	Arg	Asp	Glu	Lys	
465					470					475					480	
Lys	Glu	Asn	Tyr	His	Lys	His	Ala	Cys	Arg	Glu	Tyr	Arg	Ile	His	Lys	
485					490					495						
Glu	Leu	Asp	His	Pro	Arg	Ile	Val	Lys	Leu	Tyr	Asp	Tyr	Phe	Ser	Leu	
500					505					510						
Asp	Thr	Asp	Ser	Phe	Cys	Thr	Val	Leu	Glu	Tyr	Cys	Glu	Gly	Asn	Asp	
515					520					525						
Leu	Asp	Phe	Tyr	Leu	Lys	Gln	His	Lys	Leu	Met	Ser	Glu	Lys	Glu	Ala	
530					535					540						
Arg	Ser	Ile	Ile	Met	Gln	Ile	Val	Asn	Ala	Leu	Lys	Tyr	Leu	Asn	Glu	
545					550					555					560	
Ile	Lys	Pro	Pro	Ile	Ile	His	Tyr	Asp	Leu	Lys	Pro	Gly	Asn	Ile	Leu	
565					570					575						
Leu	Val	Asn	Gly	Thr	Ala	Cys	Gly	Glu	Ile	Lys	Ile	Thr	Asp	Phe	Gly	

580					585					590						
Leu	Ser	Lys	Ile	Met	Asp	Asp	Asp	Ser	Tyr	Asn	Ser	Val	Asp	Gly	Met	
595					600					605						
Glu	Leu	Thr	Ser	Gln	Gly	Ala	Gly	Thr	Tyr	Trp	Tyr	Leu	Pro	Pro	Glu	
610					615					620						
Cys	Phe	Val	Val	Gly	Lys	Glu	Pro	Pro	Lys	Ile	Ser	Asn	Lys	Val	Asp	
625					630					635					640	
Val	Trp	Ser	Val	Gly	Val	Ile	Phe	Tyr	Gln	Cys	Leu	Tyr	Gly	Arg	Lys	
645					650					655						
Pro	Phe	Gly	His	Asn	Gln	Ser	Gln	Gln	Asp	Ile	Leu	Gln	Glu	Asn	Thr	
660					665					670						
Ile	Leu	Lys	Ala	Thr	Glu	Val	Gln	Phe	Pro	Pro	Lys	Pro	Val	Val	Thr	
675					680					685						
Pro	Glu	Ala	Lys	Ala	Phe	Ile	Arg	Arg	Cys	Leu	Ala	Tyr	Arg	Lys	Arg	
690					695					700						
Asp	Arg	Ile	Asp	Val	Gln	Gln	Leu	Ala	Cys	Asp	Pro	Tyr	Leu	Leu	Pro	
705					710					715					720	
His	Ile	Arg	Lys	Ser	Val	Ser	Thr	Ser	Ser	Pro	Ala	Gly	Ala	Ala	Ile	
725					730					735						
Ala	Ser	Thr	Ser	Gly	Ala	Ser	Asn	Asn	Ser	Ser	Ser	Ser	Asn			
740					745											

<210> 262
 <211> 712
 <212> PRT
 <213> Homo sapiens

<400> 262

Met	Ala	Gly	Gly	Pro	Gly	Pro	Gly	Glu	Pro	Ala	Ala	Pro	Gly	Ala	Gln	
1				5				10					15			
His	Phe	Leu	Tyr	Glu	Val	Pro	Pro	Trp	Val	Met	Cys	Arg	Phe	Tyr	Lys	
20					25					30						
Val	Met	Asp	Ala	Leu	Glu	Pro	Ala	Asp	Trp	Cys	Gln	Phe	Ala	Ala	Leu	
35					40					45						
Ile	Val	Arg	Asp	Gln	Thr	Glu	Leu	Arg	Leu	Cys	Glu	Arg	Ser	Gly	Gln	
50					55					60						
Arg	Thr	Ala	Ser	Val	Leu	Trp	Pro	Trp	Ile	Asn	Arg	Asn	Ala	Arg	Val	
65					70					75					80	
Ala	Asp	Leu	Val	His	Ile	Leu	Thr	His	Leu	Gln	Leu	Leu	Arg	Ala	Arg	
85					90					95						

Asp	Ile	Ile	Thr	Ala	Trp	His	Pro	Pro	Ala	Pro	Leu	Pro	Ser	Pro	Gly	100	105	110
Thr	Thr	Ala	Pro	Arg	Pro	Ser	Ser	Ile	Pro	Ala	Pro	Ala	Glu	Ala	Glu	115	120	125
Ala	Trp	Ser	Pro	Arg	Lys	Leu	Pro	Ser	Ser	Ala	Ser	Thr	Phe	Leu	Ser	130	135	140
Pro	Ala	Phe	Pro	Gly	Ser	Gln	Thr	His	Ser	Gly	Pro	Glu	Leu	Gly	Leu	145	150	155
Val	Pro	Ser	Pro	Ala	Ser	Leu	Trp	Pro	Pro	Pro	Pro	Ser	Pro	Ala	Pro	165	170	175
Ser	Ser	Thr	Lys	Pro	Gly	Pro	Glu	Ser	Ser	Val	Ser	Leu	Leu	Gln	Gly	180	185	190
Ala	Arg	Pro	Ser	Pro	Phe	Cys	Trp	Pro	Leu	Cys	Glu	Ile	Ser	Arg	Gly	195	200	205
Thr	His	Asn	Phe	Ser	Glu	Glu	Leu	Lys	Ile	Gly	Glu	Gly	Gly	Phe	Gly	210	215	220
Cys	Val	Tyr	Arg	Ala	Val	Met	Arg	Asn	Thr	Val	Tyr	Ala	Val	Lys	Arg	225	230	235
Leu	Lys	Glu	Asn	Ala	Asp	Leu	Glu	Trp	Thr	Ala	Val	Lys	Gln	Ser	Phe	245	250	255
Leu	Thr	Glu	Val	Glu	Gln	Leu	Ser	Arg	Phe	Arg	His	Pro	Asn	Ile	Val	260	265	270
Asp	Phe	Ala	Gly	Tyr	Cys	Ala	Gln	Asn	Gly	Phe	Tyr	Cys	Leu	Val	Tyr	275	280	285
Gly	Phe	Leu	Pro	Asn	Gly	Ser	Leu	Glu	Asp	Arg	Leu	His	Cys	Gln	Thr	290	295	300
Gln	Ala	Cys	Pro	Pro	Leu	Ser	Trp	Pro	Gln	Arg	Leu	Asp	Ile	Leu	Leu	305	310	315
Gly	Thr	Ala	Arg	Ala	Ile	Gln	Phe	Leu	His	Gln	Asp	Ser	Pro	Ser	Leu	325	330	335
Ile	His	Gly	Asp	Ile	Lys	Ser	Ser	Asn	Val	Leu	Leu	Asp	Glu	Arg	Leu	340	345	350
Thr	Pro	Lys	Leu	Gly	Asp	Phe	Gly	Leu	Ala	Arg	Phe	Ser	Arg	Phe	Ala	355	360	365
Gly	Ser	Ser	Pro	Ser	Gln	Ser	Ser	Met	Val	Ala	Arg	Thr	Gln	Thr	Val	370	375	380
Arg	Gly	Thr	Leu	Ala	Tyr	Leu	Pro	Glu	Glu	Tyr	Ile	Lys	Thr	Gly	Arg	385	390	395
																		400

Leu	Ala	Val	Asp	Thr	Asp	Thr	Phe	Ser	Phe	Gly	Val	Val	Val	Leu	Glu	405	410	415	
Thr	Leu	Ala	Gly	Gln	Arg	Ala	Val	Lys	Thr	His	Gly	Ala	Arg	Thr	Lys	420	425	430	
Tyr	Leu	Lys	Asp	Leu	Val	Glu	Glu	Glu	Ala	Glu	Glu	Ala	Gly	Val	Ala	435	440	445	
Leu	Arg	Ser	Thr	Gln	Ser	Thr	Leu	Gln	Ala	Gly	Leu	Ala	Ala	Asp	Ala	450	455	460	
Trp	Ala	Ala	Pro	Ile	Ala	Met	Gln	Ile	Tyr	Lys	Lys	His	Leu	Asp	Pro	465	470	475	480
Arg	Pro	Gly	Pro	Cys	Pro	Pro	Glu	Leu	Gly	Leu	Gly	Leu	Gly	Gln	Leu	485	490	495	
Ala	Cys	Cys	Cys	Leu	His	Arg	Arg	Ala	Lys	Arg	Arg	Pro	Pro	Met	Thr	500	505	510	
Gln	Val	Tyr	Glu	Arg	Leu	Glu	Lys	Leu	Gln	Ala	Val	Val	Ala	Gly	Val	515	520	525	
Pro	Gly	His	Leu	Glu	Ala	Ala	Ser	Cys	Ile	Pro	Pro	Ser	Pro	Gln	Glu	530	535	540	
Asn	Ser	Tyr	Val	Ser	Ser	Thr	Gly	Arg	Ala	His	Ser	Gly	Ala	Ala	Pro	545	550	555	560
Trp	Gln	Pro	Leu	Ala	Ala	Pro	Ser	Gly	Ala	Ser	Ala	Gln	Ala	Ala	Glu	565	570	575	
Gln	Leu	Gln	Arg	Gly	Pro	Asn	Gln	Pro	Val	Glu	Ser	Asp	Glu	Ser	Leu	580	585	590	
Gly	Gly	Leu	Ser	Ala	Ala	Leu	Arg	Ser	Trp	His	Leu	Thr	Pro	Ser	Cys	595	600	605	
Pro	Leu	Asp	Pro	Ala	Pro	Leu	Arg	Glu	Ala	Gly	Cys	Pro	Gln	Gly	Asp	610	615	620	
Thr	Ala	Gly	Glu	Ser	Ser	Trp	Gly	Ser	Gly	Pro	Gly	Ser	Arg	Pro	Thr	625	630	635	640
Ala	Val	Glu	Gly	Leu	Ala	Leu	Gly	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Glu	645	650	655	
Pro	Pro	Gln	Ile	Ile	Ile	Asn	Pro	Ala	Arg	Gln	Lys	Met	Val	Gln	Lys	660	665	670	
Leu	Ala	Leu	Tyr	Glu	Asp	Gly	Ala	Leu	Asp	Ser	Leu	Gln	Leu	Leu	Ser	675	680	685	
Ser	Ser	Ser	Leu	Pro	Gly	Leu	Gly	Leu	Glu	Gln	Asp	Arg	Gln	Gly	Pro	690	695	700	

Glu Glu Ser Asp Glu Phe Gln Ser
705 710

<210> 263
<211> 712
<212> PRT
<213> Homo sapiens

<400> 263

Met Ala Gly Gly Pro Gly Pro Gly Glu Pro Ala Ala Pro Gly Ala Gln
1 5 10 15

His Phe Leu Tyr Glu Val Pro Pro Trp Val Met Cys Arg Phe Tyr Lys
20 25 30

Val Met Asp Ala Leu Glu Pro Ala Asp Trp Cys Gln Phe Ala Ala Leu
35 40 45

Ile Val Arg Asp Gln Thr Glu Leu Arg Leu Cys Glu Arg Ser Gly Gln
50 55 60

Arg Thr Ala Ser Val Leu Trp Pro Trp Ile Asn Arg Asn Ala Arg Val
65 70 75 80

Ala Asp Leu Val His Ile Leu Thr His Leu Gln Leu Leu Arg Ala Arg
85 90 95

Asp Ile Ile Thr Ala Trp His Pro Pro Ala Pro Leu Pro Ser Pro Gly
100 105 110

Thr Thr Ala Pro Arg Pro Ser Ser Ile Pro Ala Pro Ala Glu Ala Glu
115 120 125

Ala Trp Ser Pro Arg Lys Leu Pro Ser Ser Ala Ser Thr Phe Leu Ser
130 135 140

Pro Ala Phe Pro Gly Ser Gln Thr His Ser Gly Pro Glu Leu Gly Leu
145 150 155 160

Val Pro Ser Pro Ala Ser Leu Trp Pro Pro Pro Pro Ser Pro Ala Pro
165 170 175

Ser Ser Thr Lys Pro Gly Pro Glu Ser Ser Val Ser Leu Leu Gln Gly
180 185 190

Ala Arg Pro Ser Pro Phe Cys Trp Pro Leu Cys Glu Ile Ser Arg Gly
195 200 205

Thr His Asn Phe Ser Glu Glu Leu Lys Ile Gly Glu Gly Gly Phe Gly
210 215 220

Cys Val Tyr Arg Ala Val Met Arg Asn Thr Val Tyr Ala Val Lys Arg
225 230 235 240

Leu Lys Glu Asn Ala Asp Leu Glu Trp Thr Ala Val Lys Gln Ser Phe
245 250 255

Leu Thr Glu Val Glu Gln Leu Ser Arg Phe Arg His Pro Asn Ile Val	260	265	270
Asp Phe Ala Gly Tyr Cys Ala Gln Asn Gly Phe Tyr Cys Leu Val Tyr	275	280	285
Gly Phe Leu Pro Asn Gly Ser Leu Glu Asp Arg Leu His Cys Gln Thr	290	295	300
Gln Ala Cys Pro Pro Leu Ser Trp Pro Gln Arg Leu Asp Ile Leu Leu	305	310	315
Gly Thr Ala Arg Ala Ile Gln Phe Leu His Gln Asp Ser Pro Ser Leu	325	330	335
Ile His Gly Asp Ile Lys Ser Ser Asn Val Leu Leu Asp Glu Arg Leu	340	345	350
Thr Pro Lys Leu Gly Asp Phe Gly Leu Ala Arg Phe Ser Arg Phe Ala	355	360	365
Gly Ser Ser Pro Ser Gln Ser Ser Met Val Ala Arg Thr Gln Thr Val	370	375	380
Arg Gly Thr Leu Ala Tyr Leu Pro Glu Glu Tyr Ile Lys Thr Gly Arg	385	390	395
Leu Ala Val Asp Thr Asp Thr Phe Ser Phe Gly Val Val Val Leu Glu	405	410	415
Thr Leu Ala Gly Gln Arg Ala Val Lys Thr His Gly Ala Arg Thr Lys	420	425	430
Tyr Leu Lys Asp Leu Val Glu Glu Glu Ala Glu Glu Ala Gly Val Ala	435	440	445
Leu Arg Ser Thr Gln Ser Thr Leu Gln Ala Gly Leu Ala Ala Asp Ala	450	455	460
Trp Ala Ala Pro Ile Ala Met Gln Ile Tyr Lys Lys His Leu Asp Pro	465	470	475
Arg Pro Gly Pro Cys Pro Pro Glu Leu Gly Leu Gly Leu Gly Gln Leu	485	490	495
Ala Cys Cys Cys Leu His Arg Arg Ala Lys Arg Arg Pro Pro Met Thr	500	505	510
Gln Val Tyr Glu Arg Leu Glu Lys Leu Gln Ala Val Val Ala Gly Val	515	520	525
Pro Gly His Leu Glu Ala Ala Ser Cys Ile Pro Pro Ser Pro Gln Glu	530	535	540
Asn Ser Tyr Val Ser Ser Thr Gly Arg Ala His Ser Gly Ala Ala Pro	545	550	555
			560

Trp Gln Pro Leu Ala Ala Pro Ser Gly Ala Ser Ala Gln Ala Ala Glu
 565 570 575
 Gln Leu Gln Arg Gly Pro Asn Gln Pro Val Glu Ser Asp Glu Ser Leu
 580 585 590
 Gly Gly Leu Ser Ala Ala Leu Arg Ser Trp His Leu Thr Pro Ser Cys
 595 600 605
 Pro Leu Asp Pro Ala Pro Leu Arg Glu Ala Gly Cys Pro Gln Gly Asp
 610 615 620
 Thr Ala Gly Glu Ser Ser Trp Gly Ser Gly Pro Gly Ser Arg Pro Thr
 625 630 635 640
 Ala Val Glu Gly Leu Ala Leu Gly Ser Ser Ala Ser Ser Ser Ser Glu
 645 650 655
 Pro Pro Gln Ile Ile Ile Asn Pro Ala Arg Gln Lys Met Val Gln Lys
 660 665 670
 Leu Ala Leu Tyr Glu Asp Gly Ala Leu Asp Ser Leu Gln Leu Leu Ser
 675 680 685
 Ser Ser Ser Leu Pro Gly Leu Gly Leu Glu Gln Asp Arg Gln Gly Pro
 690 695 700
 Glu Glu Ser Asp Glu Phe Gln Ser
 705 710

<210> 264
 <211> 712
 <212> PRT
 <213> Homo sapiens

<400> 264

Met Ala Gly Gly Pro Gly Pro Gly Glu Pro Ala Ala Pro Gly Ala Gln
 1 5 10 15
 His Phe Leu Tyr Glu Val Pro Pro Trp Val Met Cys Arg Phe Tyr Lys
 20 25 30
 Val Met Asp Ala Leu Glu Pro Ala Asp Trp Cys Gln Phe Ala Ala Leu
 35 40 45
 Ile Val Arg Asp Gln Thr Glu Leu Arg Leu Cys Glu Arg Ser Gly Gln
 50 55 60
 Arg Thr Ala Ser Val Leu Trp Pro Trp Ile Asn Arg Asn Ala Arg Val
 65 70 75 80
 Ala Asp Leu Val His Ile Leu Thr His Leu Gln Leu Leu Arg Ala Arg
 85 90 95
 Asp Ile Ile Thr Ala Trp His Pro Pro Ala Pro Leu Pro Ser Pro Gly

100					105					110					
Thr	Thr	Ala	Pro	Arg	Pro	Ser	Ser	Ile	Pro	Ala	Pro	Ala	Glu	Ala	Glu
		115					120					125			
Ala	Trp	Ser	Pro	Arg	Lys	Leu	Pro	Ser	Ser	Ala	Ser	Thr	Phe	Leu	Ser
		130					135					140			
Pro	Ala	Phe	Pro	Gly	Ser	Gln	Thr	His	Ser	Gly	Pro	Glu	Leu	Gly	Leu
							150					155			160
Val	Pro	Ser	Pro	Ala	Ser	Leu	Trp	Pro	Pro	Pro	Pro	Ser	Pro	Ala	Pro
									170					175	
Ser	Ser	Thr	Lys	Pro	Gly	Pro	Glu	Ser	Ser	Val	Ser	Leu	Leu	Gln	Gly
			180						185					190	
Ala	Arg	Pro	Ser	Pro	Phe	Cys	Trp	Pro	Leu	Cys	Glu	Ile	Ser	Arg	Gly
			195						200					205	
Thr	His	Asn	Phe	Ser	Glu	Glu	Leu	Lys	Ile	Gly	Glu	Gly	Gly	Phe	Gly
												220			
Cys	Val	Tyr	Arg	Ala	Val	Met	Arg	Asn	Thr	Val	Tyr	Ala	Val	Lys	Arg
												235			240
Leu	Lys	Glu	Asn	Ala	Asp	Leu	Glu	Trp	Thr	Ala	Val	Lys	Gln	Ser	Phe
														255	
Leu	Thr	Glu	Val	Glu	Gln	Leu	Ser	Arg	Phe	Arg	His	Pro	Asn	Ile	Val
														270	
Asp	Phe	Ala	Gly	Tyr	Cys	Ala	Gln	Asn	Gly	Phe	Tyr	Cys	Leu	Val	Tyr
														285	
Gly	Phe	Leu	Pro	Asn	Gly	Ser	Leu	Glu	Asp	Arg	Leu	His	Cys	Gln	Thr
														300	
Gln	Ala	Cys	Pro	Pro	Leu	Ser	Trp	Pro	Gln	Arg	Leu	Asp	Ile	Leu	Leu
														320	
Gly	Thr	Ala	Arg	Ala	Ile	Gln	Phe	Leu	His	Gln	Asp	Ser	Pro	Ser	Leu
														335	
Ile	His	Gly	Asp	Ile	Lys	Ser	Ser	Asn	Val	Leu	Leu	Asp	Glu	Arg	Leu
														350	
Thr	Pro	Lys	Leu	Gly	Asp	Phe	Gly	Leu	Ala	Arg	Phe	Ser	Arg	Phe	Ala
														365	
Gly	Ser	Ser	Pro	Ser	Gln	Ser	Ser	Met	Val	Ala	Arg	Thr	Gln	Thr	Val
														380	
Arg	Gly	Thr	Leu	Ala	Tyr	Leu	Pro	Glu	Glu	Tyr	Ile	Lys	Thr	Gly	Arg
														400	
Leu	Ala	Val	Asp	Thr	Asp	Thr	Phe	Ser	Phe	Gly	Val	Val	Val	Leu	Glu

405					410					415						
Thr	Leu	Ala	Gly	Gln	Arg	Ala	Val	Lys	Thr	His	Gly	Ala	Arg	Thr	Lys	
420					425					430						
Tyr	Leu	Lys	Asp	Leu	Val	Glu	Glu	Glu	Ala	Glu	Glu	Ala	Gly	Val	Ala	
435					440					445						
Leu	Arg	Ser	Thr	Gln	Ser	Thr	Leu	Gln	Ala	Gly	Leu	Ala	Ala	Asp	Ala	
450					455					460						
Trp	Ala	Ala	Pro	Ile	Ala	Met	Gln	Ile	Tyr	Lys	Lys	His	Leu	Asp	Pro	
465					470					475					480	
Arg	Pro	Gly	Pro	Cys	Pro	Pro	Glu	Leu	Gly	Leu	Gly	Leu	Gly	Gln	Leu	
485					490					495						
Ala	Cys	Cys	Cys	Leu	His	Arg	Arg	Ala	Lys	Arg	Arg	Pro	Pro	Met	Thr	
500					505					510						
Gln	Val	Tyr	Glu	Arg	Leu	Glu	Lys	Leu	Gln	Ala	Val	Val	Ala	Gly	Val	
515					520					525						
Pro	Gly	His	Leu	Glu	Ala	Ala	Ser	Cys	Ile	Pro	Pro	Ser	Pro	Gln	Glu	
530					535					540						
Asn	Ser	Tyr	Val	Ser	Ser	Thr	Gly	Arg	Ala	His	Ser	Gly	Ala	Ala	Pro	
545					550					555					560	
Trp	Gln	Pro	Leu	Ala	Ala	Pro	Ser	Gly	Ala	Ser	Ala	Gln	Ala	Ala	Glu	
565					570					575						
Gln	Leu	Gln	Arg	Gly	Pro	Asn	Gln	Pro	Val	Glu	Ser	Asp	Glu	Ser	Leu	
580					585					590						
Gly	Gly	Leu	Ser	Ala	Ala	Leu	Arg	Ser	Trp	His	Leu	Thr	Pro	Ser	Cys	
595					600					605						
Pro	Leu	Asp	Pro	Ala	Pro	Leu	Arg	Glu	Ala	Gly	Cys	Pro	Gln	Gly	Asp	
610					615					620						
Thr	Ala	Gly	Glu	Ser	Ser	Trp	Gly	Ser	Gly	Pro	Gly	Ser	Arg	Pro	Thr	
625					630					635					640	
Ala	Val	Glu	Gly	Leu	Ala	Leu	Gly	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Glu	
645					650					655						
Pro	Pro	Gln	Ile	Ile	Ile	Asn	Pro	Ala	Arg	Gln	Lys	Met	Val	Gln	Lys	
660					665					670						
Leu	Ala	Leu	Tyr	Glu	Asp	Gly	Ala	Leu	Asp	Ser	Leu	Gln	Leu	Leu	Ser	
675					680					685						
Ser	Ser	Ser	Leu	Pro	Gly	Leu	Gly	Leu	Glu	Gln	Asp	Arg	Gln	Gly	Pro	
690					695					700						
Glu Glu Ser Asp Glu Phe Gln Ser																

705

710

<210> 265
 <211> 740
 <212> PRT
 <213> Homo sapiens

<400> 265

Met Pro Leu Ala Gln Leu Ala Asp Pro Trp Gln Lys Met Ala Val Glu
 1 5 10 15

Ser Pro Ser Asp Ser Ala Glu Asn Gly Gln Gln Ile Met Asp Glu Pro
 20 25 30

Met Gly Glu Glu Glu Ile Asn Pro Gln Thr Glu Glu Val Ser Ile Lys
 35 40 45

Glu Ile Ala Ile Thr His His Val Lys Glu Gly His Glu Lys Ala Asp
 50 55 60

Pro Ser Gln Phe Glu Leu Leu Lys Val Leu Gly Gln Gly Ser Phe Gly
 65 70 75 80

Lys Val Phe Leu Val Lys Lys Ile Ser Gly Ser Asp Ala Arg Gln Leu
 85 90 95

Tyr Ala Met Lys Val Leu Lys Lys Ala Thr Leu Lys Val Arg Asp Arg
 100 105 110

Val Arg Thr Lys Met Glu Arg Asp Ile Leu Val Glu Val Asn His Pro
 115 120 125

Phe Ile Val Lys Leu His Tyr Ala Phe Gln Thr Glu Gly Lys Leu Tyr
 130 135 140

Leu Ile Leu Asp Phe Leu Arg Gly Gly Asp Leu Phe Thr Arg Leu Ser
 145 150 155 160

Lys Glu Val Met Phe Thr Glu Glu Asp Val Lys Phe Tyr Leu Ala Glu
 165 170 175

Leu Ala Leu Ala Leu Asp His Leu His Ser Leu Gly Ile Ile Tyr Arg
 180 185 190

Asp Leu Lys Pro Glu Asn Ile Leu Leu Asp Glu Glu Gly His Ile Lys
 195 200 205

Leu Thr Asp Phe Gly Leu Ser Lys Glu Ser Ile Asp His Glu Lys Lys
 210 215 220

Ala Tyr Ser Phe Cys Gly Thr Val Glu Tyr Met Ala Pro Glu Val Val
 225 230 235 240

Asn Arg Arg Gly His Thr Gln Ser Ala Asp Trp Trp Ser Phe Gly Val
 245 250 255

Leu	Met	Phe	Glu	Met	Leu	Thr	Gly	Thr	Leu	Pro	Phe	Gln	Gly	Lys	Asp	260	265	270	
Arg	Lys	Glu	Thr	Met	Thr	Met	Ile	Leu	Lys	Ala	Lys	Leu	Gly	Met	Pro	275	280	285	
Gln	Phe	Leu	Ser	Pro	Glu	Ala	Gln	Ser	Leu	Leu	Arg	Met	Leu	Phe	Lys	290	295	300	
Arg	Asn	Pro	Ala	Asn	Arg	Leu	Gly	Ala	Gly	Pro	Asp	Gly	Val	Glu	Glu	305	310	315	320
Ile	Lys	Arg	His	Ser	Phe	Phe	Ser	Thr	Ile	Asp	Trp	Asn	Lys	Leu	Tyr	325	330	335	
Arg	Arg	Glu	Ile	His	Pro	Pro	Phe	Lys	Pro	Ala	Thr	Gly	Arg	Pro	Glu	340	345	350	
Asp	Thr	Phe	Tyr	Phe	Asp	Pro	Glu	Phe	Thr	Ala	Lys	Thr	Pro	Lys	Asp	355	360	365	
Ser	Pro	Gly	Ile	Pro	Pro	Ser	Ala	Asn	Ala	His	Gln	Leu	Phe	Arg	Gly	370	375	380	
Phe	Ser	Phe	Val	Ala	Ile	Thr	Ser	Asp	Asp	Glu	Ser	Gln	Ala	Met	Gln	385	390	395	400
Thr	Val	Gly	Val	His	Ser	Ile	Val	Gln	Gln	Leu	His	Arg	Asn	Ser	Ile	405	410	415	
Gln	Phe	Thr	Asp	Gly	Tyr	Glu	Val	Lys	Glu	Asp	Ile	Gly	Val	Gly	Ser	420	425	430	
Tyr	Ser	Val	Cys	Lys	Arg	Cys	Ile	His	Lys	Ala	Thr	Asn	Met	Glu	Phe	435	440	445	
Ala	Val	Lys	Ile	Ile	Asp	Lys	Ser	Lys	Arg	Asp	Pro	Thr	Glu	Glu	Ile	450	455	460	
Glu	Ile	Leu	Leu	Arg	Tyr	Gly	Gln	His	Pro	Asn	Ile	Ile	Thr	Leu	Lys	465	470	475	480
Asp	Val	Tyr	Asp	Asp	Gly	Lys	Tyr	Val	Tyr	Val	Val	Thr	Glu	Leu	Met	485	490	495	
Lys	Gly	Gly	Glu	Leu	Leu	Asp	Lys	Ile	Leu	Arg	Gln	Lys	Phe	Phe	Ser	500	505	510	
Glu	Arg	Glu	Ala	Ser	Ala	Val	Leu	Phe	Thr	Ile	Thr	Lys	Thr	Val	Glu	515	520	525	
Tyr	Leu	His	Ala	Gln	Gly	Val	Val	His	Arg	Asp	Leu	Lys	Pro	Ser	Asn	530	535	540	
Ile	Leu	Tyr	Val	Asp	Glu	Ser	Gly	Asn	Pro	Glu	Ser	Ile	Arg	Ile	Cys	545	550	555	560

Asp Phe Gly Phe Ala Lys Gln Leu Arg Ala Glu Asn Gly Leu Leu Met
565 570 575

Thr Pro Cys Tyr Thr Ala Asn Phe Val Ala Pro Glu Val Leu Lys Arg
580 585 590

Gln Gly Tyr Asp Ala Ala Cys Asp Ile Trp Ser Leu Gly Val Leu Leu
595 600 605

Tyr Thr Met Leu Thr Gly Tyr Thr Pro Phe Ala Asn Gly Pro Asp Asp
610 615 620

Thr Pro Glu Glu Ile Leu Ala Arg Ile Gly Ser Gly Lys Phe Ser Leu
625 630 635 640

Ser Gly Gly Tyr Trp Asn Ser Val Ser Asp Thr Ala Lys Asp Leu Val
645 650 655

Ser Lys Met Leu His Val Asp Pro His Gln Arg Leu Thr Ala Ala Leu
660 665 670

Val Leu Arg His Pro Trp Ile Val His Trp Asp Gln Leu Pro Gln Tyr
675 680 685

Gln Leu Asn Arg Gln Asp Ala Pro His Leu Val Lys Gly Ala Met Ala
690 695 700

Ala Thr Tyr Ser Ala Leu Asn Arg Asn Gln Ser Pro Val Leu Glu Pro
705 710 715 720

Val Gly Arg Ser Thr Leu Ala Gln Arg Arg Gly Ile Lys Lys Ile Thr
725 730 735

Ser Thr Ala Leu
740

<210> 266

<211> 740

<212> PRT

<213> Homo sapiens

<400> 266

Met Pro Leu Ala Gln Leu Ala Asp Pro Trp Gln Lys Met Ala Val Glu
1 5 10 15

Ser Pro Ser Asp Ser Ala Glu Asn Gly Gln Gln Ile Met Asp Glu Pro
20 25 30

Met Gly Glu Glu Glu Ile Asn Pro Gln Thr Glu Glu Val Ser Ile Lys
35 40 45

Glu Ile Ala Ile Thr His His Val Lys Glu Gly His Glu Lys Ala Asp
50 55 60

Pro Ser Gln Phe Glu Leu Leu Lys Val Leu Gly Gln Gly Ser Phe Gly
65 70 75 80

Lys Val Phe Leu Val Lys Lys Ile Ser Gly Ser Asp Ala Arg Gln Leu
 85 90 95
 Tyr Ala Met Lys Val Leu Lys Lys Ala Thr Leu Lys Val Arg Asp Arg
 100 105 110
 Val Arg Thr Lys Met Glu Arg Asp Ile Leu Val Glu Val Asn His Pro
 115 120 125
 Phe Ile Val Lys Leu His Tyr Ala Phe Gln Thr Glu Gly Lys Leu Tyr
 130 135 140
 Leu Ile Leu Asp Phe Leu Arg Gly Gly Asp Leu Phe Thr Arg Leu Ser
 145 150 155 160
 Lys Glu Val Met Phe Thr Glu Glu Asp Val Lys Phe Tyr Leu Ala Glu
 165 170 175
 Leu Ala Leu Ala Leu Asp His Leu His Ser Leu Gly Ile Ile Tyr Arg
 180 185 190
 Asp Leu Lys Pro Glu Asn Ile Leu Leu Asp Glu Glu Gly His Ile Lys
 195 200 205
 Leu Thr Asp Phe Gly Leu Ser Lys Glu Ser Ile Asp His Glu Lys Lys
 210 215 220
 Ala Tyr Ser Phe Cys Gly Thr Val Glu Tyr Met Ala Pro Glu Val Val
 225 230 235 240
 Asn Arg Arg Gly His Thr Gln Ser Ala Asp Trp Trp Ser Phe Gly Val
 245 250 255
 Leu Met Phe Glu Met Leu Thr Gly Thr Leu Pro Phe Gln Gly Lys Asp
 260 265 270
 Arg Lys Glu Thr Met Thr Met Ile Leu Lys Ala Lys Leu Gly Met Pro
 275 280 285
 Gln Phe Leu Ser Pro Glu Ala Gln Ser Leu Leu Arg Met Leu Phe Lys
 290 295 300
 Arg Asn Pro Ala Asn Arg Leu Gly Ala Gly Pro Asp Gly Val Glu Glu
 305 310 315 320
 Ile Lys Arg His Ser Phe Phe Ser Thr Ile Asp Trp Asn Lys Leu Tyr
 325 330 335
 Arg Arg Glu Ile His Pro Pro Phe Lys Pro Ala Thr Gly Arg Pro Glu
 340 345 350
 Asp Thr Phe Tyr Phe Asp Pro Glu Phe Thr Ala Lys Thr Pro Lys Asp
 355 360 365
 Ser Pro Gly Ile Pro Pro Ser Ala Asn Ala His Gln Leu Phe Arg Gly
 370 375 380

Phe	Ser	Phe	Val	Ala	Ile	Thr	Ser	Asp	Asp	Glu	Ser	Gln	Ala	Met	Gln	385	390	395	400
Thr	Val	Gly	Val	His	Ser	Ile	Val	Gln	Gln	Leu	His	Arg	Asn	Ser	Ile		405	410	415
Gln	Phe	Thr	Asp	Gly	Tyr	Glu	Val	Lys	Glu	Asp	Ile	Gly	Val	Gly	Ser		420	425	430
Tyr	Ser	Val	Cys	Lys	Arg	Cys	Ile	His	Lys	Ala	Thr	Asn	Met	Glu	Phe		435	440	445
Ala	Val	Lys	Ile	Ile	Asp	Lys	Ser	Lys	Arg	Asp	Pro	Thr	Glu	Glu	Ile		450	455	460
Glu	Ile	Leu	Leu	Arg	Tyr	Gly	Gln	His	Pro	Asn	Ile	Ile	Thr	Leu	Lys	465	470	475	480
Asp	Val	Tyr	Asp	Asp	Gly	Lys	Tyr	Val	Tyr	Val	Val	Thr	Glu	Leu	Met		485	490	495
Lys	Gly	Gly	Glu	Leu	Leu	Asp	Lys	Ile	Leu	Arg	Gln	Lys	Phe	Phe	Ser		500	505	510
Glu	Arg	Glu	Ala	Ser	Ala	Val	Leu	Phe	Thr	Ile	Thr	Lys	Thr	Val	Glu		515	520	525
Tyr	Leu	His	Ala	Gln	Gly	Val	Val	His	Arg	Asp	Leu	Lys	Pro	Ser	Asn	530	535	540	
Ile	Leu	Tyr	Val	Asp	Glu	Ser	Gly	Asn	Pro	Glu	Ser	Ile	Arg	Ile	Cys	545	550	555	560
Asp	Phe	Gly	Phe	Ala	Lys	Gln	Leu	Arg	Ala	Glu	Asn	Gly	Leu	Leu	Met		565	570	575
Thr	Pro	Cys	Tyr	Thr	Ala	Asn	Phe	Val	Ala	Pro	Glu	Val	Leu	Lys	Arg		580	585	590
Gln	Gly	Tyr	Asp	Ala	Ala	Cys	Asp	Ile	Trp	Ser	Leu	Gly	Val	Leu	Leu		595	600	605
Tyr	Thr	Met	Leu	Thr	Gly	Tyr	Thr	Pro	Phe	Ala	Asn	Gly	Pro	Asp	Asp	610	615	620	
Thr	Pro	Glu	Glu	Ile	Leu	Ala	Arg	Ile	Gly	Ser	Gly	Lys	Phe	Ser	Leu	625	630	635	640
Ser	Gly	Gly	Tyr	Trp	Asn	Ser	Val	Ser	Asp	Thr	Ala	Lys	Asp	Leu	Val		645	650	655
Ser	Lys	Met	Leu	His	Val	Asp	Pro	His	Gln	Arg	Leu	Thr	Ala	Ala	Leu		660	665	670
Val	Leu	Arg	His	Pro	Trp	Ile	Val	His	Trp	Asp	Gln	Leu	Pro	Gln	Tyr	675	680	685	

Gln Leu Asn Arg Gln Asp Ala Pro His Leu Val Lys Gly Ala Met Ala
690 695 700

Ala Thr Tyr Ser Ala Leu Asn Arg Asn Gln Ser Pro Val Leu Glu Pro
705 710 715 720

Val Gly Arg Ser Thr Leu Ala Gln Arg Arg Gly Ile Lys Lys Ile Thr
725 730 735

Ser Thr Ala Leu
740

<210> 267
<211> 1374
<212> PRT
<213> Homo sapiens

<400> 267

Met Ser Thr Glu Ala Asp Glu Gly Ile Thr Phe Ser Val Pro Pro Phe
1 5 10 15

Ala Pro Ser Gly Phe Cys Thr Ile Pro Glu Gly Gly Ile Cys Arg Arg
20 25 30

Gly Gly Ala Ala Ala Val Gly Glu Gly Glu Glu His Gln Leu Pro Pro
35 40 45

Pro Pro Pro Gly Ser Phe Trp Asn Val Glu Ser Ala Ala Ala Pro Gly
50 55 60

Ile Gly Cys Pro Ala Ala Thr Ser Ser Ser Ser Ala Thr Arg Gly Arg
65 70 75 80

Gly Ser Ser Val Gly Gly Gly Ser Arg Arg Thr Thr Val Ala Tyr Val
85 90 95

Ile Asn Glu Ala Ser Gln Gly Gln Leu Val Val Ala Glu Ser Glu Ala
100 105 110

Leu Gln Ser Leu Arg Glu Ala Cys Glu Thr Val Gly Ala Thr Leu Glu
115 120 125

Thr Leu His Phe Gly Lys Leu Asp Phe Gly Glu Thr Thr Val Leu Asp
130 135 140

Arg Phe Tyr Asn Ala Asp Ile Ala Val Val Glu Met Ser Asp Ala Phe
145 150 155 160

Arg Gln Pro Ser Leu Phe Tyr His Leu Gly Val Arg Glu Ser Phe Ser
165 170 175

Met Ala Asn Asn Ile Ile Leu Tyr Cys Asp Thr Asn Ser Asp Ser Leu
180 185 190

Gln Ser Leu Lys Glu Ile Ile Cys Gln Lys Asn Thr Met Cys Thr Gly

195					200					205						
Asn	Tyr	Thr	Phe	Val	Pro	Tyr	Met	Ile	Thr	Pro	His	Asn	Lys	Val	Tyr	
210					215					220						
Cys	Cys	Asp	Ser	Ser	Phe	Met	Lys	Gly	Leu	Thr	Glu	Leu	Met	Gln	Pro	
225					230					235					240	
Asn	Phe	Glu	Leu	Leu	Leu	Gly	Pro	Ile	Cys	Leu	Pro	Leu	Val	Asp	Arg	
245					250					255						
Phe	Ile	Gln	Leu	Leu	Lys	Val	Ala	Gln	Ala	Ser	Ser	Ser	Gln	Tyr	Phe	
260					265					270						
Arg	Glu	Ser	Ile	Leu	Asn	Asp	Ile	Arg	Lys	Ala	Arg	Asn	Leu	Tyr	Thr	
275					280					285						
Gly	Lys	Glu	Leu	Ala	Ala	Glu	Leu	Ala	Arg	Ile	Arg	Gln	Arg	Val	Asp	
290					295					300						
Asn	Ile	Glu	Val	Leu	Thr	Ala	Asp	Ile	Val	Ile	Asn	Leu	Leu	Leu	Ser	
305					310					315					320	
Tyr	Arg	Asp	Ile	Gln	Asp	Tyr	Asp	Ser	Ile	Val	Lys	Leu	Val	Glu	Thr	
325					330					335						
Leu	Glu	Lys	Leu	Pro	Thr	Phe	Asp	Leu	Ala	Ser	His	His	His	Val	Lys	
340					345					350						
Phe	His	Tyr	Ala	Phe	Ala	Leu	Asn	Arg	Arg	Asn	Leu	Pro	Gly	Asp	Arg	
355					360					365						
Ala	Lys	Ala	Leu	Asp	Ile	Met	Ile	Pro	Met	Val	Gln	Ser	Glu	Gly	Gln	
370					375					380						
Val	Ala	Ser	Asp	Met	Tyr	Cys	Leu	Val	Gly	Arg	Ile	Tyr	Lys	Asp	Met	
385					390					395					400	
Phe	Leu	Asp	Ser	Asn	Phe	Thr	Asp	Thr	Glu	Ser	Arg	Asp	His	Gly	Ala	
405					410					415						
Ser	Trp	Phe	Lys	Lys	Ala	Phe	Glu	Ser	Glu	Pro	Thr	Leu	Gln	Ser	Gly	
420					425					430						
Ile	Asn	Tyr	Ala	Val	Leu	Leu	Leu	Ala	Ala	Gly	His	Gln	Phe	Glu	Ser	
435					440					445						
Ser	Phe	Glu	Leu	Arg	Lys	Val	Gly	Val	Lys	Leu	Ser	Ser	Leu	Leu	Gly	
450					455					460						
Lys	Lys	Gly	Asn	Leu	Glu	Lys	Leu	Gln	Ser	Tyr	Trp	Glu	Val	Gly	Phe	
465					470					475					480	
Phe	Leu	Gly	Ala	Ser	Val	Leu	Ala	Asn	Asp	His	Met	Arg	Val	Ile	Gln	
485					490					495						
Ala	Ser	Glu	Lys	Leu	Phe	Lys	Leu	Lys	Thr	Pro	Ala	Trp	Tyr	Leu	Lys	

500					505					510						
Ser	Ile	Val	Glu	Thr	Ile	Leu	Ile	Tyr	Lys	His	Phe	Val	Lys	Leu	Thr	
515					520					525						
Thr	Glu	Gln	Pro	Val	Ala	Lys	Gln	Glu	Leu	Val	Asp	Phe	Trp	Met	Asp	
530					535					540						
Phe	Leu	Val	Glu	Ala	Thr	Lys	Thr	Asp	Val	Thr	Val	Val	Arg	Phe	Pro	
545					550					555					560	
Val	Leu	Ile	Leu	Glu	Pro	Thr	Lys	Ile	Tyr	Gln	Pro	Ser	Tyr	Leu	Ser	
565					570					575						
Ile	Asn	Asn	Glu	Val	Glu	Glu	Lys	Thr	Ile	Ser	Ile	Trp	His	Val	Leu	
580					585					590						
Pro	Asp	Asp	Lys	Lys	Gly	Ile	His	Glu	Trp	Asn	Phe	Ser	Ala	Ser	Ser	
595					600					605						
Val	Arg	Gly	Val	Ser	Ile	Ser	Lys	Phe	Glu	Glu	Arg	Cys	Cys	Phe	Leu	
610					615					620						
Tyr	Val	Leu	His	Asn	Ser	Asp	Asp	Phe	Gln	Ile	Tyr	Phe	Cys	Thr	Glu	
625					630					635					640	
Leu	His	Cys	Lys	Lys	Phe	Phe	Glu	Met	Val	Asn	Thr	Ile	Thr	Glu	Glu	
645					650					655						
Lys	Gly	Arg	Ser	Thr	Glu	Glu	Gly	Asp	Cys	Glu	Ser	Asp	Leu	Leu	Glu	
660					665					670						
Tyr	Asp	Tyr	Glu	Tyr	Asp	Glu	Asn	Gly	Asp	Arg	Val	Val	Leu	Gly	Lys	
675					680					685						
Gly	Thr	Tyr	Gly	Ile	Val	Tyr	Ala	Gly	Arg	Asp	Leu	Ser	Asn	Gln	Val	
690					695					700						
Arg	Ile	Ala	Ile	Lys	Glu	Ile	Pro	Glu	Arg	Asp	Ser	Arg	Tyr	Ser	Gln	
705					710					715					720	
Pro	Leu	His	Glu	Glu	Ile	Ala	Leu	His	Lys	His	Leu	Lys	His	Lys	Asn	
725					730					735						
Ile	Val	Gln	Tyr	Leu	Gly	Ser	Phe	Ser	Glu	Asn	Gly	Phe	Ile	Lys	Ile	
740					745					750						
Phe	Met	Glu	Gln	Val	Pro	Gly	Gly	Ser	Leu	Ser	Ala	Leu	Leu	Arg	Ser	
755					760					765						
Lys	Trp	Gly	Pro	Leu	Lys	Asp	Asn	Glu	Gln	Thr	Ile	Gly	Phe	Tyr	Thr	
770					775					780						
Lys	Gln	Ile	Leu	Glu	Gly	Leu	Lys	Tyr	Leu	His	Asp	Asn	Gln	Ile	Val	
785					790					795					800	
His	Arg	Asp	Ile	Lys	Gly	Asp	Asn	Val	Leu	Ile	Asn	Thr	Tyr	Ser	Gly	

805										810					815				
Val	Leu	Lys	Ile	Ser	Asp	Phe	Gly	Thr	Ser	Lys	Arg	Leu	Ala	Gly	Ile				
			820						825					830					
Asn	Pro	Cys	Thr	Glu	Thr	Phe	Thr	Gly	Thr	Leu	Gln	Tyr	Met	Ala	Pro				
		835						840					845						
Glu	Ile	Ile	Asp	Lys	Gly	Pro	Arg	Gly	Tyr	Gly	Lys	Ala	Ala	Asp	Ile				
	850					855					860								
Trp	Ser	Leu	Gly	Cys	Thr	Ile	Ile	Glu	Met	Ala	Thr	Gly	Lys	Pro	Pro				
865					870					875					880				
Phe	Tyr	Glu	Leu	Gly	Glu	Pro	Gln	Ala	Ala	Met	Phe	Lys	Val	Gly	Met				
				885					890					895					
Phe	Lys	Val	His	Pro	Glu	Ile	Pro	Glu	Ser	Met	Ser	Ala	Glu	Ala	Lys				
			900					905					910						
Ala	Phe	Ile	Leu	Lys	Cys	Phe	Glu	Pro	Asp	Pro	Asp	Lys	Arg	Ala	Cys				
		915					920					925							
Ala	Asn	Asp	Leu	Leu	Val	Asp	Glu	Phe	Leu	Lys	Val	Ser	Ser	Lys	Lys				
	930					935					940								
Lys	Lys	Thr	Gln	Pro	Lys	Leu	Ser	Ala	Leu	Ser	Ala	Gly	Ser	Asn	Glu				
945					950					955				960					
Tyr	Leu	Arg	Ser	Ile	Ser	Leu	Pro	Val	Pro	Val	Leu	Val	Glu	Asp	Thr				
				965					970					975					
Ser	Ser	Ser	Ser	Glu	Tyr	Gly	Ser	Val	Ser	Pro	Asp	Thr	Glu	Leu	Lys				
			980					985					990						
Val	Asp	Pro	Phe	Ser	Phe	Lys	Thr	Arg	Ala	Lys	Ser	Cys	Gly	Glu	Arg				
	995						1000						1005						
Asp	Val	Lys	Gly	Ile	Arg	Thr	Leu	Phe	Leu	Gly	Ile	Pro	Asp	Glu					
	1010					1015					1020								
Asn	Phe	Glu	Asp	His	Ser	Ala	Pro	Pro	Ser	Pro	Glu	Glu	Lys	Asp					
	1025					1030					1035								
Ser	Gly	Phe	Phe	Met	Leu	Arg	Lys	Asp	Ser	Glu	Arg	Arg	Ala	Thr					
	1040					1045					1050								
Leu	His	Arg	Ile	Leu	Thr	Glu	Asp	Gln	Asp	Lys	Ile	Val	Arg	Asn					
	1055					1060					1065								
Leu	Met	Glu	Ser	Leu	Ala	Gln	Gly	Ala	Glu	Glu	Pro	Lys	Leu	Lys					
	1070					1075					1080								
Trp	Glu	His	Ile	Thr	Thr	Leu	Ile	Ala	Ser	Leu	Arg	Glu	Phe	Val					
	1085					1090					1095								
Arg	Ser	Thr	Asp	Arg	Lys	Ile	Ile	Ala	Thr	Thr	Leu	Ser	Lys	Leu					

1100	1105	1110
Lys Leu Glu Leu Asp Phe Asp 1115	Ser His Gly Ile Ser 1120	Gln Val Gln 1125
Val Val Leu Phe Gly Phe Gln 1130	Asp Ala Val Asn Lys 1135	Val Leu Arg 1140
Asn His Asn Ile Lys Pro His 1145	Trp Met Phe Ala Leu 1150	Asp Ser Ile 1155
Ile Arg Lys Ala Val Gln Thr 1160	Ala Ile Thr Ile Leu 1165	Val Pro Glu 1170
Leu Arg Pro His Phe Ser Leu 1175	Ala Ser Glu Ser Asp 1180	Thr Ala Asp 1185
Gln Glu Asp Leu Asp Val Glu 1190	Asp Asp His Glu Glu 1195	Gln Pro Ser 1200
Asn Gln Thr Val Arg Arg Pro 1205	Gln Ala Val Ile Glu 1210	Asp Ala Val 1215
Ala Thr Ser Gly Val Ser Thr 1220	Leu Ser Ser Thr Val 1225	Ser His Asp 1230
Ser Gln Ser Ala His Arg Ser 1235	Leu Asn Val Gln Leu 1240	Gly Arg Met 1245
Lys Ile Glu Thr Asn Arg Leu 1250	Leu Glu Glu Leu Val 1255	Arg Lys Glu 1260
Lys Glu Leu Gln Ala Leu Leu 1265	His Arg Ala Ile Glu 1270	Glu Lys Asp 1275
Gln Glu Ile Lys His Leu Lys 1280	Leu Lys Ser Gln Pro 1285	Ile Glu Ile 1290
Pro Glu Leu Pro Val Phe His 1295	Leu Asn Ser Ser Gly 1300	Thr Asn Thr 1305
Glu Asp Ser Glu Leu Thr Asp 1310	Trp Leu Arg Val Asn 1315	Gly Ala Asp 1320
Glu Asp Thr Ile Ser Arg Phe 1325	Leu Ala Glu Asp Tyr 1330	Thr Leu Leu 1335
Asp Val Leu Tyr Tyr Val Thr 1340	Arg Asp Asp Leu Lys 1345	Cys Leu Arg 1350
Leu Arg Gly Gly Met Leu Cys 1355	Thr Leu Trp Lys Ala 1360	Ile Ile Asp 1365
Phe Arg Asn Lys Gln Thr 1370		

<211> 729
<212> PRT
<213> Homo sapiens

<400> 268

Met	Gln	Ser	Thr	Ser	Asn	His	Leu	Trp	Leu	Leu	Ser	Asp	Ile	Leu	Gly
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Gln	Gly	Ala	Thr	Ala	Asn	Val	Phe	Arg	Gly	Arg	His	Lys	Lys	Thr	Gly
			20					25					30		
Asp	Leu	Phe	Ala	Ile	Lys	Val	Phe	Asn	Asn	Ile	Ser	Phe	Leu	Arg	Pro
		35					40					45			
Val	Asp	Val	Gln	Met	Arg	Glu	Phe	Glu	Val	Leu	Lys	Lys	Leu	Asn	His
	50					55					60				
Lys	Asn	Ile	Val	Lys	Leu	Phe	Ala	Ile	Glu	Glu	Glu	Thr	Thr	Thr	Arg
65					70					75					80
His	Lys	Val	Leu	Ile	Met	Glu	Phe	Cys	Pro	Cys	Gly	Ser	Leu	Tyr	Thr
				85					90					95	
Val	Leu	Glu	Glu	Pro	Ser	Asn	Ala	Tyr	Gly	Leu	Pro	Glu	Ser	Glu	Phe
			100						105				110		
Leu	Ile	Val	Leu	Arg	Asp	Val	Val	Gly	Gly	Met	Asn	His	Leu	Arg	Glu
		115					120					125			
Asn	Gly	Ile	Val	His	Arg	Asp	Ile	Lys	Pro	Gly	Asn	Ile	Met	Arg	Val
	130					135					140				
Ile	Gly	Glu	Asp	Gly	Gln	Ser	Val	Tyr	Lys	Leu	Thr	Asp	Phe	Gly	Ala
145					150					155					160
Ala	Arg	Glu	Leu	Glu	Asp	Asp	Glu	Gln	Phe	Val	Ser	Leu	Tyr	Gly	Thr
				165					170					175	
Glu	Glu	Tyr	Leu	His	Pro	Asp	Met	Tyr	Glu	Arg	Ala	Val	Leu	Arg	Lys
			180					185					190		
Asp	His	Gln	Lys	Lys	Tyr	Gly	Ala	Thr	Val	Asp	Leu	Trp	Ser	Ile	Gly
		195					200					205			
Val	Thr	Phe	Tyr	His	Ala	Ala	Thr	Gly	Ser	Leu	Pro	Phe	Arg	Pro	Phe
	210					215					220				
Glu	Gly	Pro	Arg	Arg	Asn	Lys	Glu	Val	Met	Tyr	Lys	Ile	Ile	Thr	Gly
225					230					235					240
Lys	Pro	Ser	Gly	Ala	Ile	Ser	Gly	Val	Gln	Lys	Ala	Glu	Asn	Gly	Pro
				245					250					255	
Ile	Asp	Trp	Ser	Gly	Asp	Met	Pro	Val	Ser	Cys	Ser	Leu	Ser	Arg	Gly
			260					265						270	

Leu	Gln	Val	Leu	Leu	Thr	Pro	Val	Leu	Ala	Asn	Ile	Leu	Glu	Ala	Asp	
		275						280					285			
Gln	Glu	Lys	Cys	Trp	Gly	Phe	Asp	Gln	Phe	Phe	Ala	Glu	Thr	Ser	Asp	
		290					295				300					
Ile	Leu	His	Arg	Met	Val	Ile	His	Val	Phe	Ser	Leu	Gln	Gln	Met	Thr	
305					310					315					320	
Ala	His	Lys	Ile	Tyr	Ile	His	Ser	Tyr	Asn	Thr	Ala	Thr	Ile	Phe	His	
				325					330					335		
Glu	Leu	Val	Tyr	Lys	Gln	Thr	Lys	Ile	Ile	Ser	Ser	Asn	Gln	Glu	Leu	
			340					345					350			
Ile	Tyr	Glu	Gly	Arg	Arg	Leu	Val	Leu	Glu	Pro	Gly	Arg	Leu	Ala	Gln	
		355					360					365				
His	Phe	Pro	Lys	Thr	Thr	Glu	Glu	Asn	Pro	Ile	Phe	Val	Val	Ser	Arg	
	370					375					380					
Glu	Pro	Leu	Asn	Thr	Ile	Gly	Leu	Ile	Tyr	Glu	Lys	Ile	Ser	Leu	Pro	
385					390					395					400	
Lys	Val	His	Pro	Arg	Tyr	Asp	Leu	Asp	Gly	Asp	Ala	Ser	Met	Ala	Lys	
				405					410					415		
Ala	Ile	Thr	Gly	Val	Val	Cys	Tyr	Ala	Cys	Arg	Ile	Ala	Ser	Thr	Leu	
			420					425					430			
Leu	Leu	Tyr	Gln	Glu	Leu	Met	Arg	Lys	Gly	Ile	Arg	Trp	Leu	Ile	Glu	
		435					440					445				
Leu	Ile	Lys	Asp	Asp	Tyr	Asn	Glu	Thr	Val	His	Lys	Lys	Thr	Glu	Val	
	450					455					460					
Val	Ile	Thr	Leu	Asp	Phe	Cys	Ile	Arg	Asn	Ile	Glu	Lys	Thr	Val	Lys	
465					470					475					480	
Val	Tyr	Glu	Lys	Leu	Met	Lys	Ile	Asn	Leu	Glu	Ala	Ala	Glu	Leu	Gly	
				485					490					495		
Glu	Ile	Ser	Asp	Ile	His	Thr	Lys	Leu	Leu	Arg	Leu	Ser	Ser	Ser	Gln	
			500					505					510			
Gly	Thr	Ile	Glu	Thr	Ser	Leu	Gln	Asp	Ile	Asp	Ser	Arg	Leu	Ser	Pro	
		515					520					525				
Gly	Gly	Ser	Leu	Ala	Asp	Ala	Trp	Ala	His	Gln	Glu	Gly	Thr	His	Pro	
		530				535					540					
Lys	Asp	Arg	Asn	Val	Glu	Lys	Leu	Gln	Val	Leu	Leu	Asn	Cys	Met	Thr	
545					550					555					560	
Glu	Ile	Tyr	Tyr	Gln	Phe	Lys	Lys	Asp	Lys	Ala	Glu	Arg	Arg	Leu	Ala	
				565					570					575		

Tyr Asn Glu Glu Gln Ile His Lys Phe Asp Lys Gln Lys Leu Tyr Tyr
580 585 590

His Ala Thr Lys Ala Met Thr His Phe Thr Asp Glu Cys Val Lys Lys
595 600 605

Tyr Glu Ala Phe Leu Asn Lys Ser Glu Glu Trp Ile Arg Lys Met Leu
610 615 620

His Leu Arg Lys Gln Leu Leu Ser Leu Thr Asn Gln Cys Phe Asp Ile
625 630 635 640

Glu Glu Glu Val Ser Lys Tyr Gln Glu Tyr Thr Asn Glu Leu Gln Glu
645 650 655

Thr Leu Pro Gln Lys Met Phe Thr Ala Ser Ser Gly Ile Lys His Thr
660 665 670

Met Thr Pro Ile Tyr Pro Ser Ser Asn Thr Leu Val Glu Met Thr Leu
675 680 685

Gly Met Lys Lys Leu Lys Glu Glu Met Glu Gly Val Val Lys Glu Leu
690 695 700

Ala Glu Asn Asn His Ile Leu Glu Arg Phe Gly Ser Leu Thr Met Asp
705 710 715 720

Gly Gly Leu Arg Asn Val Asp Cys Leu
725

<210> 269
<211> 422
<212> PRT
<213> Homo sapiens

<400> 269

Met Ser Leu His Phe Leu Tyr Tyr Cys Ser Glu Pro Thr Leu Asp Val
1 5 10 15

Lys Ile Ala Phe Cys Gln Gly Phe Asp Lys Gln Val Asp Val Ser Tyr
20 25 30

Ile Ala Lys His Tyr Asn Met Ser Lys Ser Lys Val Asp Asn Gln Phe
35 40 45

Tyr Ser Val Glu Val Gly Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr
50 55 60

Gln Asn Leu Lys Pro Ile Gly Ser Gly Ala Gln Gly Ile Val Cys Ala
65 70 75 80

Ala Tyr Asp Ala Val Leu Asp Arg Asn Val Ala Ile Lys Lys Leu Ser
85 90 95

Arg Pro Phe Gln Asn Gln Thr His Ala Lys Arg Ala Tyr Arg Glu Leu
100 105 110

Val	Leu	Met	Lys	Cys	Val	Asn	His	Lys	Asn	Ile	Ile	Ser	Leu	Leu	Asn	
		115						120				125				
Val	Phe	Thr	Pro	Gln	Lys	Thr	Leu	Glu	Glu	Phe	Gln	Asp	Val	Tyr	Leu	
	130					135					140					
Val	Met	Glu	Leu	Met	Asp	Ala	Asn	Leu	Cys	Gln	Val	Ile	Gln	Met	Glu	
145					150					155					160	
Leu	Asp	His	Glu	Arg	Met	Ser	Tyr	Leu	Leu	Tyr	Gln	Met	Leu	Cys	Gly	
			165						170					175		
Ile	Lys	His	Leu	His	Ser	Ala	Gly	Ile	Ile	His	Arg	Asp	Leu	Lys	Pro	
		180						185					190			
Ser	Asn	Ile	Val	Val	Lys	Ser	Asp	Cys	Thr	Leu	Lys	Ile	Leu	Asp	Phe	
	195						200					205				
Gly	Leu	Ala	Arg	Thr	Ala	Gly	Thr	Ser	Phe	Met	Met	Thr	Pro	Tyr	Val	
	210					215					220					
Val	Thr	Arg	Tyr	Tyr	Arg	Ala	Pro	Glu	Val	Ile	Leu	Gly	Met	Gly	Tyr	
225					230					235					240	
Lys	Glu	Asn	Val	Asp	Ile	Trp	Ser	Val	Gly	Cys	Ile	Met	Gly	Glu	Met	
				245					250					255		
Val	Arg	His	Lys	Ile	Leu	Phe	Pro	Gly	Arg	Asp	Tyr	Ile	Asp	Gln	Trp	
		260						265					270			
Asn	Lys	Val	Ile	Glu	Gln	Leu	Gly	Thr	Pro	Cys	Pro	Glu	Phe	Met	Lys	
		275					280					285				
Lys	Leu	Gln	Pro	Thr	Val	Arg	Asn	Tyr	Val	Glu	Asn	Arg	Pro	Lys	Tyr	
	290					295					300					
Ala	Gly	Leu	Thr	Phe	Pro	Lys	Leu	Phe	Pro	Asp	Ser	Leu	Phe	Pro	Ala	
305					310					315					320	
Asp	Ser	Glu	His	Asn	Lys	Leu	Lys	Ala	Ser	Gln	Ala	Arg	Asp	Leu	Leu	
				325				330						335		
Ser	Lys	Met	Leu	Val	Ile	Asp	Pro	Ala	Lys	Arg	Ile	Ser	Val	Asp	Asp	
		340						345					350			
Ala	Leu	Gln	His	Pro	Tyr	Ile	Asn	Val	Trp	Tyr	Asp	Pro	Ala	Glu	Val	
	355						360					365				
Glu	Ala	Pro	Pro	Pro	Gln	Ile	Tyr	Asp	Lys	Gln	Leu	Asp	Glu	Arg	Glu	
	370					375					380					
His	Thr	Ile	Glu	Glu	Trp	Lys	Glu	Leu	Ile	Tyr	Lys	Glu	Val	Met	Asn	
385					390					395					400	
Ser	Glu	Glu	Lys	Thr	Lys	Asn	Gly	Val	Val	Lys	Gly	Gln	Pro	Ser	Pro	
				405					410					415		

Ser Ala Gln Val Gln Gln
420

<210> 270
<211> 422
<212> PRT
<213> Homo sapiens

<400> 270

Met Ser Leu His Phe Leu Tyr Tyr Cys Ser Glu Pro Thr Leu Asp Val
1 5 10 15

Lys Ile Ala Phe Cys Gln Gly Phe Asp Lys Gln Val Asp Val Ser Tyr
20 25 30

Ile Ala Lys His Tyr Asn Met Ser Lys Ser Lys Val Asp Asn Gln Phe
35 40 45

Tyr Ser Val Glu Val Gly Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr
50 55 60

Gln Asn Leu Lys Pro Ile Gly Ser Gly Ala Gln Gly Ile Val Cys Ala
65 70 75 80

Ala Tyr Asp Ala Val Leu Asp Arg Asn Val Ala Ile Lys Lys Leu Ser
85 90 95

Arg Pro Phe Gln Asn Gln Thr His Ala Lys Arg Ala Tyr Arg Glu Leu
100 105 110

Val Leu Met Lys Cys Val Asn His Lys Asn Ile Ile Ser Leu Leu Asn
115 120 125

Val Phe Thr Pro Gln Lys Thr Leu Glu Glu Phe Gln Asp Val Tyr Leu
130 135 140

Val Met Glu Leu Met Asp Ala Asn Leu Cys Gln Val Ile Gln Met Glu
145 150 155 160

Leu Asp His Glu Arg Met Ser Tyr Leu Leu Tyr Gln Met Leu Cys Gly
165 170 175

Ile Lys His Leu His Ser Ala Gly Ile Ile His Arg Asp Leu Lys Pro
180 185 190

Ser Asn Ile Val Val Lys Ser Asp Cys Thr Leu Lys Ile Leu Asp Phe
195 200 205

Gly Leu Ala Arg Thr Ala Gly Thr Ser Phe Met Met Thr Pro Tyr Val
210 215 220

Val Thr Arg Tyr Tyr Arg Ala Pro Glu Val Ile Leu Gly Met Gly Tyr
225 230 235 240

Lys Glu Asn Val Asp Ile Trp Ser Val Gly Cys Ile Met Gly Glu Met

245										250					255															
Val	Arg	His	Lys	Ile	Leu	Phe	Pro	Gly	Arg	Asp	Tyr	Ile	Asp	Gln	Trp															
			260					265					270																	
Asn	Lys	Val	Ile	Glu	Gln	Leu	Gly	Thr	Pro	Cys	Pro	Glu	Phe	Met	Lys															
		275					280					285																		
Lys	Leu	Gln	Pro	Thr	Val	Arg	Asn	Tyr	Val	Glu	Asn	Arg	Pro	Lys	Tyr															
		290				295					300																			
Ala	Gly	Leu	Thr	Phe	Pro	Lys	Leu	Phe	Pro	Asp	Ser	Leu	Phe	Pro	Ala															
305					310					315					320															
Asp	Ser	Glu	His	Asn	Lys	Leu	Lys	Ala	Ser	Gln	Ala	Arg	Asp	Leu	Leu															
				325				330						335																
Ser	Lys	Met	Leu	Val	Ile	Asp	Pro	Ala	Lys	Arg	Ile	Ser	Val	Asp	Asp															
			340				345						350																	
Ala	Leu	Gln	His	Pro	Tyr	Ile	Asn	Val	Trp	Tyr	Asp	Pro	Ala	Glu	Val															
		355					360					365																		
Glu	Ala	Pro	Pro	Pro	Gln	Ile	Tyr	Asp	Lys	Gln	Leu	Asp	Glu	Arg	Glu															
	370					375					380																			
His	Thr	Ile	Glu	Glu	Trp	Lys	Glu	Leu	Ile	Tyr	Lys	Glu	Val	Met	Asn															
385					390					395				400																
Ser	Glu	Glu	Lys	Thr	Lys	Asn	Gly	Val	Val	Lys	Gly	Gln	Pro	Ser	Pro															
			405					410					415																	
Ser	Ala	Gln	Val	Gln	Gln																									
			420																											

<210> 271

<211> 465

<212> PRT

<213> Homo sapiens

<400> 271

Met	Ala	Met	Thr	Gly	Ser	Thr	Pro	Cys	Ser	Ser	Met	Ser	Asn	His	Thr
1			5					10					15		
Lys	Glu	Arg	Val	Thr	Met	Thr	Lys	Val	Thr	Leu	Glu	Asn	Phe	Tyr	Ser
		20					25					30			
Asn	Leu	Ile	Ala	Gln	His	Glu	Glu	Arg	Glu	Met	Arg	Gln	Lys	Lys	Leu
	35					40					45				
Glu	Lys	Val	Met	Glu	Glu	Glu	Gly	Leu	Lys	Asp	Glu	Glu	Lys	Arg	Leu
	50				55					60					
Arg	Arg	Ser	Ala	His	Ala	Arg	Lys	Glu	Thr	Glu	Phe	Leu	Arg	Leu	Lys
65				70				75						80	

Arg	Thr	Arg	Leu	Gly	Leu	Glu	Asp	Phe	Glu	Ser	Leu	Lys	Val	Ile	Gly	85	90	95
Arg	Gly	Ala	Phe	Gly	Glu	Val	Arg	Leu	Val	Gln	Lys	Lys	Asp	Thr	Gly	100	105	110
His	Val	Tyr	Ala	Met	Lys	Ile	Leu	Arg	Lys	Ala	Asp	Met	Leu	Glu	Lys	115	120	125
Glu	Gln	Val	Gly	His	Ile	Arg	Ala	Glu	Arg	Asp	Ile	Leu	Val	Glu	Ala	130	135	140
Asp	Ser	Leu	Trp	Val	Val	Lys	Met	Phe	Tyr	Ser	Phe	Gln	Asp	Lys	Leu	145	150	155
Asn	Leu	Tyr	Leu	Ile	Met	Glu	Phe	Leu	Pro	Gly	Gly	Asp	Met	Met	Thr	165	170	175
Leu	Leu	Met	Lys	Lys	Asp	Thr	Leu	Thr	Glu	Glu	Glu	Thr	Gln	Phe	Tyr	180	185	190
Ile	Ala	Glu	Thr	Val	Leu	Ala	Ile	Asp	Ser	Ile	His	Gln	Leu	Gly	Phe	195	200	205
Ile	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Leu	Leu	Leu	Asp	Ser	Lys	Gly	210	215	220
His	Val	Lys	Leu	Ser	Asp	Phe	Gly	Leu	Cys	Thr	Gly	Leu	Lys	Lys	Ala	225	230	235
His	Arg	Thr	Glu	Phe	Tyr	Arg	Asn	Leu	Asn	His	Ser	Leu	Pro	Ser	Asp	245	250	255
Phe	Thr	Phe	Gln	Asn	Met	Asn	Ser	Lys	Arg	Lys	Ala	Glu	Thr	Trp	Lys	260	265	270
Arg	Asn	Arg	Arg	Gln	Leu	Ala	Phe	Ser	Thr	Val	Gly	Thr	Pro	Asp	Tyr	275	280	285
Ile	Ala	Pro	Glu	Val	Phe	Met	Gln	Thr	Gly	Tyr	Asn	Lys	Leu	Cys	Asp	290	295	300
Trp	Trp	Ser	Leu	Gly	Val	Ile	Met	Tyr	Glu	Met	Leu	Ile	Gly	Tyr	Pro	305	310	315
Pro	Phe	Cys	Ser	Glu	Thr	Pro	Gln	Glu	Thr	Tyr	Lys	Lys	Val	Met	Asn	325	330	335
Trp	Lys	Glu	Thr	Leu	Thr	Phe	Pro	Pro	Glu	Val	Pro	Ile	Ser	Glu	Lys	340	345	350
Ala	Lys	Asp	Leu	Ile	Leu	Arg	Phe	Cys	Cys	Glu	Trp	Glu	His	Arg	Ile	355	360	365
Gly	Ala	Pro	Gly	Val	Glu	Glu	Ile	Lys	Ser	Asn	Ser	Phe	Phe	Glu	Gly	370	375	380

Val Asp Trp Glu His Ile Arg Glu Arg Pro Ala Ala Ile Ser Ile Glu
385 390 395 400

Ile Lys Ser Ile Asp Asp Thr Ser Asn Phe Asp Glu Phe Pro Glu Ser
405 410 415

Asp Ile Leu Lys Pro Thr Val Ala Thr Ser Asn His Pro Glu Thr Asp
420 425 430

Tyr Lys Asn Lys Asp Trp Val Phe Ile Asn Tyr Thr Tyr Lys Arg Phe
435 440 445

Glu Gly Leu Thr Ala Arg Gly Ala Ile Pro Ser Tyr Met Lys Ala Ala
450 455 460

Lys
465

<210> 272
<211> 547
<212> PRT
<213> Homo sapiens

<400> 272

Met Ala Glu Pro Ser Gly Ser Pro Val His Val Gln Leu Pro Gln Gln
1 5 10 15

Ala Ala Pro Val Thr Ala Ala Ala Ala Ala Pro Ala Ala Ala Thr
20 25 30

Ala Ala Pro Ala Pro Ala Ala Pro Ala Ala Pro Ala Pro Ala
35 40 45

Pro Ala Pro Ala Ala Gln Ala Val Gly Trp Pro Ile Cys Arg Asp Ala
50 55 60

Tyr Glu Leu Gln Glu Val Ile Gly Ser Gly Ala Thr Ala Val Val Gln
65 70 75 80

Ala Ala Leu Cys Lys Pro Arg Gln Glu Arg Val Ala Ile Lys Arg Ile
85 90 95

Asn Leu Glu Lys Cys Gln Thr Ser Met Asp Glu Leu Leu Lys Glu Ile
100 105 110

Gln Ala Met Ser Gln Cys Ser His Pro Asn Val Val Thr Tyr Tyr Thr
115 120 125

Ser Phe Val Val Lys Asp Glu Leu Trp Leu Val Met Lys Leu Leu Ser
130 135 140

Gly Gly Ser Met Leu Asp Ile Ile Lys Tyr Ile Val Asn Arg Gly Glu
145 150 155 160

His Lys Asn Gly Val Leu Glu Glu Ala Ile Ile Ala Thr Ile Leu Lys
165 170 175

Glu	Val	Leu	Glu	Gly	Leu	Asp	Tyr	Leu	His	Arg	Asn	Gly	Gln	Ile	His	180	185	190	
Arg	Asp	Leu	Lys	Ala	Gly	Asn	Ile	Leu	Leu	Gly	Glu	Asp	Gly	Ser	Val	195	200	205	
Gln	Ile	Ala	Asp	Phe	Gly	Val	Ser	Ala	Phe	Leu	Ala	Thr	Gly	Gly	Asp	210	215	220	
Val	Thr	Arg	Asn	Lys	Val	Arg	Lys	Thr	Phe	Val	Gly	Thr	Pro	Cys	Trp	225	230	235	240
Met	Ala	Pro	Glu	Val	Met	Glu	Gln	Val	Arg	Gly	Tyr	Asp	Phe	Lys	Ala	245	250	255	
Asp	Met	Trp	Ser	Phe	Gly	Ile	Thr	Ala	Ile	Glu	Leu	Ala	Thr	Gly	Ala	260	265	270	
Ala	Pro	Tyr	His	Lys	Tyr	Pro	Pro	Met	Lys	Val	Leu	Met	Leu	Thr	Leu	275	280	285	
Gln	Asn	Asp	Pro	Pro	Thr	Leu	Glu	Thr	Gly	Val	Glu	Asp	Lys	Glu	Met	290	295	300	
Met	Lys	Lys	Tyr	Gly	Lys	Ser	Phe	Arg	Lys	Leu	Leu	Ser	Leu	Cys	Leu	305	310	315	320
Gln	Lys	Asp	Pro	Ser	Lys	Arg	Pro	Thr	Ala	Ala	Glu	Leu	Leu	Lys	Cys	325	330	335	
Lys	Phe	Phe	Gln	Lys	Ala	Lys	Asn	Arg	Glu	Tyr	Leu	Ile	Glu	Lys	Leu	340	345	350	
Leu	Thr	Arg	Thr	Pro	Asp	Ile	Ala	Gln	Arg	Ala	Lys	Lys	Val	Arg	Arg	355	360	365	
Val	Pro	Gly	Ser	Ser	Gly	His	Leu	His	Lys	Thr	Glu	Asp	Gly	Asp	Trp	370	375	380	
Glu	Trp	Ser	Asp	Asp	Glu	Met	Asp	Glu	Lys	Ser	Glu	Glu	Gly	Lys	Ala	385	390	395	400
Ala	Phe	Ser	Gln	Glu	Lys	Ser	Arg	Arg	Val	Lys	Glu	Glu	Asn	Pro	Glu	405	410	415	
Ile	Ala	Val	Ser	Ala	Ser	Thr	Ile	Pro	Glu	Gln	Ile	Gln	Ser	Leu	Ser	420	425	430	
Val	His	Asp	Ser	Gln	Gly	Pro	Pro	Asn	Ala	Asn	Glu	Asp	Tyr	Arg	Glu	435	440	445	
Ala	Ser	Ser	Cys	Ala	Val	Asn	Leu	Val	Leu	Arg	Leu	Arg	Asn	Ser	Arg	450	455	460	
Lys	Glu	Leu	Asn	Asp	Ile	Arg	Phe	Glu	Phe	Thr	Pro	Gly	Arg	Asp	Thr	465	470	475	480

Ala Asp Gly Val Ser Gln Glu Leu Phe Ser Ala Gly Leu Val Asp Gly
485 490 495

His Asp Val Val Ile Val Ala Ala Asn Leu Gln Lys Ile Val Asp Asp
500 505 510

Pro Lys Ala Leu Lys Thr Leu Thr Phe Lys Leu Ala Ser Gly Cys Asp
515 520 525

Gly Ser Glu Ile Pro Asp Glu Val Lys Leu Ile Gly Phe Ala Gln Leu
530 535 540

Ser Val Ser
545

<210> 273
<211> 547
<212> PRT
<213> Homo sapiens

<400> 273

Met Ala Glu Pro Ser Gly Ser Pro Val His Val Gln Leu Pro Gln Gln
1 5 10 15

Ala Ala Pro Val Thr Ala Ala Ala Ala Ala Ala Pro Ala Ala Ala Thr
20 25 30

Ala Ala Pro Ala Pro Ala Ala Pro Ala Ala Pro Ala Pro Ala
35 40 45

Pro Ala Pro Ala Ala Gln Ala Val Gly Trp Pro Ile Cys Arg Asp Ala
50 55 60

Tyr Glu Leu Gln Glu Val Ile Gly Ser Gly Ala Thr Ala Val Val Gln
65 70 75 80

Ala Ala Leu Cys Lys Pro Arg Gln Glu Arg Val Ala Ile Lys Arg Ile
85 90 95

Asn Leu Glu Lys Cys Gln Thr Ser Met Asp Glu Leu Leu Lys Glu Ile
100 105 110

Gln Ala Met Ser Gln Cys Ser His Pro Asn Val Val Thr Tyr Tyr Thr
115 120 125

Ser Phe Val Val Lys Asp Glu Leu Trp Leu Val Met Lys Leu Leu Ser
130 135 140

Gly Gly Ser Met Leu Asp Ile Ile Lys Tyr Ile Val Asn Arg Gly Glu
145 150 155 160

His Lys Asn Gly Val Leu Glu Glu Ala Ile Ile Ala Thr Ile Leu Lys
165 170 175

Glu Val Leu Glu Gly Leu Asp Tyr Leu His Arg Asn Gly Gln Ile His

180					185					190					
Arg	Asp	Leu	Lys	Ala	Gly	Asn	Ile	Leu	Leu	Gly	Glu	Asp	Gly	Ser	Val
195					200					205					
Gln	Ile	Ala	Asp	Phe	Gly	Val	Ser	Ala	Phe	Leu	Ala	Thr	Gly	Gly	Asp
210					215					220					
Val	Thr	Arg	Asn	Lys	Val	Arg	Lys	Thr	Phe	Val	Gly	Thr	Pro	Cys	Trp
225					230					235					
Met	Ala	Pro	Glu	Val	Met	Glu	Gln	Val	Arg	Gly	Tyr	Asp	Phe	Lys	Ala
245					250					255					
Asp	Met	Trp	Ser	Phe	Gly	Ile	Thr	Ala	Ile	Glu	Leu	Ala	Thr	Gly	Ala
260					265					270					
Ala	Pro	Tyr	His	Lys	Tyr	Pro	Pro	Met	Lys	Val	Leu	Met	Leu	Thr	Leu
275					280					285					
Gln	Asn	Asp	Pro	Pro	Thr	Leu	Glu	Thr	Gly	Val	Glu	Asp	Lys	Glu	Met
290					295					300					
Met	Lys	Lys	Tyr	Gly	Lys	Ser	Phe	Arg	Lys	Leu	Leu	Ser	Leu	Cys	Leu
305					310					315					
Gln	Lys	Asp	Pro	Ser	Lys	Arg	Pro	Thr	Ala	Ala	Glu	Leu	Leu	Lys	Cys
325					330					335					
Lys	Phe	Phe	Gln	Lys	Ala	Lys	Asn	Arg	Glu	Tyr	Leu	Ile	Glu	Lys	Leu
340					345					350					
Leu	Thr	Arg	Thr	Pro	Asp	Ile	Ala	Gln	Arg	Ala	Lys	Lys	Val	Arg	Arg
355					360					365					
Val	Pro	Gly	Ser	Ser	Gly	His	Leu	His	Lys	Thr	Glu	Asp	Gly	Asp	Trp
370					375					380					
Glu	Trp	Ser	Asp	Asp	Glu	Met	Asp	Glu	Lys	Ser	Glu	Glu	Gly	Lys	Ala
385					390					395					
Ala	Phe	Ser	Gln	Glu	Lys	Ser	Arg	Arg	Val	Lys	Glu	Glu	Asn	Pro	Glu
405					410					415					
Ile	Ala	Val	Ser	Ala	Ser	Thr	Ile	Pro	Glu	Gln	Ile	Gln	Ser	Leu	Ser
420					425					430					
Val	His	Asp	Ser	Gln	Gly	Pro	Pro	Asn	Ala	Asn	Glu	Asp	Tyr	Arg	Glu
435					440					445					
Ala	Ser	Ser	Cys	Ala	Val	Asn	Leu	Val	Leu	Arg	Leu	Arg	Asn	Ser	Arg
450					455					460					
Lys	Glu	Leu	Asn	Asp	Ile	Arg	Phe	Glu	Phe	Thr	Pro	Gly	Arg	Asp	Thr
465					470					475					
Ala	Asp	Gly	Val	Ser	Gln	Glu	Leu	Phe	Ser	Ala	Gly	Leu	Val	Asp	Gly

485

490

495

His Asp Val Val Ile Val Ala Ala Asn Leu Gln Lys Ile Val Asp Asp
500 505 510

Pro Lys Ala Leu Lys Thr Leu Thr Phe Lys Leu Ala Ser Gly Cys Asp
515 520 525

Gly Ser Glu Ile Pro Asp Glu Val Lys Leu Ile Gly Phe Ala Gln Leu
530 535 540

Ser Val Ser
545